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A HISTORY OF AGRICULTURAL EXTENSION WORK IN THE UNITED STATES

1785–1923

BY

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FOREWORD

By C. B. Smith, *Chief, Office of Cooperative Extension Work*

For nearly 40 years A. C. True, the author of this volume, has been an employee of the United States Department of Agriculture and associated with the department and the State agricultural colleges in all their varied activities. As administrator, counselor, chairman of important committees, as a pioneer in new fields of agricultural education, research, and extension, he speaks from a wide and rich experience and on matters in which he has played a commanding part.

Doctor True brought to his tasks culture and broad scholarship and a knowledge of both country and city life. He has, therefore, throughout the years, dealt sympathetically and understandingly with agricultural problems, whether of the research laboratory, the college classroom, or the open country and rural people. This volume and its companion volumes, A History of Agricultural Education in the United States and A History of Agricultural Research in the United States, when completed, will constitute a fitting climax to a long and fruitful life of public service.

Doctor True was born in 1853. He was prepared for college at the old Boston Latin School, attended Wesleyan University, where he graduated as a bachelor of arts, with honor, in 1873, and received the further degrees of A. M. in 1876, and D. Sc. in 1906. After graduating at Wesleyan he was principal of the high school at Essex, N. Y., for two years, and teacher in the State Normal School at Westfield, Mass., for seven years.

From 1882 to 1884 he took graduate work at Harvard University, after which he became a member of the faculty of Wesleyan University, where he was associated with the famous chemist, W. O. Atwater. Professor Atwater became director of the Federal Office of Experiment Stations in 1888. Doctor True joined the staff of the office in November, 1888, as special agent to prepare a report on the agricultural colleges and experiment stations for the Paris Exposition. He became editor in 1889, vice director in 1891, and director in 1893. This latter position he held until 1915, when the Federal Office of Experiment Stations and the two Federal offices of extension work, the Office of Home Economics, and the divisions of Farmers' Institutes and Agricultural Instruction were merged to form the States Relations Service of the Department of Agriculture, and Doctor True became director of that service.

As Director of the Office of Experiment Stations, Doctor True exerted an influence throughout the years toward sustained constructive research on fundamental problems in agriculture and home economics and the building up of a strong central experiment station in each State as a department of the agricultural college.

The administration of the Office of Experiment Stations brought Doctor True in contact with the agricultural colleges, and because of his teaching experience and training, his counsel was sought by boards of trustees and college presidents on matters of college curriculums and policies. He has taken an active interest in the Association of Land Grant Colleges, for many years has been chairman of its committee on instruction in agriculture, home economics, and mechanic arts, and was president of the association in 1914. When the summer graduate school of agriculture in the United States was organized in 1902 in connection with the land-grant colleges he was made dean of the school and held that position during the 14 years these schools functioned.

Doctor True was responsible for the administration of the cooperative agricultural extension act, generally known as the Smith-Lever Act, from the time of its passage in 1914, to 1923, when he began writing this series of publications. This was a formative period in popular education for rural people, in which Federal, State, and county governments cooperated with farming people in planning the improvement of farm and home practices and rural community life. In this work, in which governments and people counseled together and financed and directed a common enterprise, many varied problems arose as to relationships, responsibilities, and policies. These Doctor True, as director of the Federal extension service, handled with wisdom, tact, and vision. From his 10 years of service in this field has come a new and efficient educational system, due in no small part to his wise guidance.

In making permanent the records of the history and development of agricultural teaching, research, and extension work in the United States, in this and other volumes, Doctor True has rendered a high universal service.

PREFACE

This account of the movement which resulted in the establishment of our national system of cooperative extension work in agriculture and home economics is supplementary to the author's monograph on the history of agricultural education in the United States. Extension work is a part of our system of agricultural education and was so presented in the former treatise. It is, however, so large and complex an enterprise in its organization and lines of work and has passed through so many phases of development peculiar to itself that it seems best to record its history more fully in a separate publication.

In the preparation of this monograph the author has had the counsel and advice of members of the staff of the Office of Cooperative Extension Work, with whom he has been associated many years. Special acknowledgment for helpful suggestions is made to C. B. Smith, A. B. Graham, O. B. Martin, and W. A. Lloyd. As sources of material the publications of the Office of Experiment Stations and the extension branches of the States Relations Service have been used chiefly, but numerous State extension publications and the works cited in the bibliography have also been consulted.

A. C. TRUE.

BEGINNING OF EXTENSION WORK, 1785 TO 1852[1]

That form of popular education of farming people in the United States now known as agricultural extension work has passed through several stages of development covering nearly a century and a half. It had its beginning in early agricultural societies from the time of the organization of the Philadelphia Society in 1785. These societies were formed to acquaint their members with what was being done to improve agriculture. But they also had among their objects to bring about local agricultural organizations and to disseminate agricultural information through their publications, newspaper articles, and lectures.

In 1792 the trustees of the Massachusetts Society for Promoting Agriculture recommended "that the members in different parts of the State would meet at stated times in places convenient to themselves and invite the aid of others who are desirous of forwarding improvements in agriculture." This society in 1812 sent out 1,000 copies of a letter to stimulate farmers in improving agriculture. Town clerks were asked to read this letter in town meetings, and the aid of the clergy was invoked to forward this movement. The next year the society reported that numerous town societies were in operation.

The societies which functioned as State or regional organizations also encouraged the formation of county societies which became numerous in the early half of the nineteenth century. To the agricultural societies we owe the holding of fairs not merely for the sale of animals or farm products but for educational purposes. Usually these took the form of competitive exhibitions with prizes, but sometimes there were addresses on agricultural subjects. A notable early instance of this was the address of John Lowell at the fair held by the Massachusetts Society at Brighton in 1818. This address was published by the society.

At an early day farmers' clubs in New York asked the Society for Promoting Agriculture, Manufactures, and Arts to send them speakers. Among the members of the society who rendered this service was Professor Mitchill, of Columbia University, who talked on the relation of chemistry and other sciences to agriculture. It will be remembered that the Rensselaer Institute, at Troy, was established in 1824 to train persons in science and its applications "to the common purposes of life," so that they might go out and instruct farmers and others by lectures in towns and school districts. This plan was suggested by the success of the courses of popular lectures of this character given by Amos Eaton in different places in New England and New York.

In 1839 there was begun a series of weekly meetings in the hall of the Massachusetts house of representatives for the purpose of discussing agricultural questions. These meetings were inaugurated by the members of the legislature organized as the Legislative Agricultural Society, but were open to

[1] The periods named in this history are not strictly defined. The dates assigned to them are for the convenience of readers and are merely approximate.

and participated in by the public. Lectures were given by prominent agriculturists and scientists. In 1840, the first meeting of the series for that winter was held January 13, and addressed by Henry Colman, commissioner for the agricultural survey of Massachusetts, Hon. Daniel Webster, and Prof. Benjamin Silliman, of Yale College. Mr. Webster's address was a comparison of the agriculture of England with that of Massachusetts (7).[2]

Professor Silliman emphasized the importance of chemistry in relation to agriculture and said: "The analysis of soils is a subject of great and indispensable importance. The knowledge obtained from geological and agricultural surveys and chemical investigations can not be too highly estimated; and the State can expend no money to greater advantage than in procuring and encouraging them." (*7*)

The records of those meetings are very meager, but they were reported in the newspapers, and their influence was potent upon the agriculture of the State through the many farmers who served as members of the legislature. Marshall P. Wilder was a leading spirit, being connected with the legislature for several years during the continuance of the society. These legislative meetings were continued until the session of 1867, when the meetings of the State board of agriculture superseded them (*49*).

In 1843 the committee on agriculture of the New York Assembly, of which Daniel Lee was chairman, suggested that "the legislature might authorize the State Agricultural Society to employ a practical and scientific farmer to give public lectures throughout the State upon practical and scientific knowledge." That year itinerant lectures were begun by the society. These proved so successful that on January 20, 1848, the society adopted a resolution approving "the plan which was adopted by the former secretaries of the New York State Agricultural Society [Daniel Lee, Joel B. Nott, and Benjamin P. Johnson] in addressing at suitable times county agricultural societies."

In Ohio in 1845, N. S. Townshend, afterwards dean of the college of agriculture, suggested that if there was a State agricultural society or a State board of agriculture either of these organizations—

might select a sufficient number of competent individuals to lecture, after the manner of medical institutions, on all the sciences having relations with agriculture. To one lecturer might be assigned geology and mineralogy, with their relations to draining, well digging, etc.; to another, chemistry, with its innumerable applications; to another, botany and vegetable physiology as applied to gardening, orcharding, and field culture; to another lecturer zoology, comparative anatomy, and physiology, showing their bearing upon the management of domestic animals; to another, the principles of pathology and therapeutics and their relation to the treatment of the diseases of animals, and all the operations of a surgical nature which the farmer is required to perform; then to another, natural philosophy and the application of its principles in the perfecting of farming implements, etc. (*50*).

He also advocated the formation of farmers' clubs in every township to hold meetings at least monthly, at which there should be lectures on the sciences and their application to agriculture, reports of committees on their visits to the farms of members, and discussions on designated subjects.

The Ohio State Board of Agriculture was created by the legislature February 28, 1846. One of its members, M. B. Bateham (*4*), in an article in the Ohio Cultivator of October 15, 1846, said "in regard to lectures we hope that the State board [of agriculture] will take some action on the subject, and that several competent

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[2] Reference is made by italic numbers in parentheses to Bibliography, p. 202.

persons may be engaged to lecture in different parts of the State, where desired, during the coming winter." This was followed by the adoption of a resolution by the board on October 28, 1846, recommending the formation of township and neighborhood clubs "for the purpose of mutual improvement by means of libraries of agricultural books and periodicals and discussions and lectures upon agriculture" and its scientific relations. At a meeting of the board on December 4, 1850, its president, former Gov. Allen Trimble, introduced a resolution to appoint Professor Mather State agricultural chemist and corresponding secretary of the board, and suggested that if practicable, "lectures on the subject of agriculture should be delivered." Four years later Doctor Townshend and three other lecturers undertook to give a three-months course on the sciences and their applications to agriculture at Oberlin, Ohio. Only a few students attended this course, and there was the same result when the lectures were given at Cleveland during the winter of 1855–56.

In 1848, when the office of State agricultural chemist was created in Maryland, the act required him to deliver "one public lecture in each elective district and a course of lectures at each county town and some central place in Baltimore County (*6*)." The clerk of the levy court or the tax commissioners were to have a copy of these lectures for publication if they deemed this advisable. When an assistant chemist was provided in 1852, the law was changed to require not less than three lectures in each county. This plan proved too burdensome and was never fully carried out.

In Evans's Rural Economist (*3*), of West Chester, Pa., 1861–62, is a suggestion to the Chester County Agricultural Society that lecturers be sent into different parts of the county to address farmers and their wives and daughters on agricultural subjects. The lecturers should include both scientists and farmers.

In 1861 the State law reorganizing the Michigan Agricultural College provided that "the State board of agriculture [then made the governing board of the college] may institute winter courses of lectures for others than students of the institution."

EARLY FARMERS' INSTITUTES, 1853 TO 1879

When the Massachusetts State Board of Agriculture was established in 1852, among the duties of its secretary was the obligation to visit the various agricultural districts of the State and deliver lectures on the practice and science of agriculture. At the third meeting of the board, September 7, 1852, a committee was appointed to provide the best means of promoting the interests of agriculture by public lectures. This committee reported at the next meeting in favor of calling public attention to the importance of having lectures on agriculture in courses given by lyceums and similar associations in rural districts. A notice calling attention to this matter was published in the agricultural papers. At the fifth meeting, January 12, 1853, President Edward Hitchcock, of Amherst College, a member of the board, read the following paper on farmers' institutes:

Since the last time I attended a meeting of the agricultural board, I have had an opportunity of witnessing the operation of a teachers' institute, under the admirable management of the Secretary of Education, and I was impressed

with the great and salutary influence which such a system must exert upon the cause of education in Massachusetts. But another thought has occurred to me. Why should we not have farmers' institutes, as well as teachers' institutes? We have agricultural chemists, scientific farmers, practical farmers, botanists, vegetable and animal physiologists, geologists, meteorologists, abundantly qualified, and, I doubt not, willing to go into the different districts of the State, and instruct the farmers there in their several departments. During the winter months, I presume that multitudes of farmers, with their families, would assemble for this purpose; nor can I doubt that their hospitality would be quite as generous as that experienced by the strangers who attend the teachers' institutes. By such a system the following objects would be accomplished.

1. A vast amount of knowledge concerning the principles of agriculture could be imparted to the farmers in every part of the State. It would, in fact, form an ambulatory agricultural school, where the young, especially, would learn very rapidly from the best masters.

2. It would give an opportunity to men well qualified, after looking at the chemical and geological constitution of the soil, to make suggestions to the farmers of the different districts as to improved modes of culture.

3. It would furnish a good mode of communicating intelligence to the farmers of discoveries and improvements in agriculture, of distributing new varieties of seeds, and making known new and improved breeds of domestic animals.

4. It would probably bring to light new manures in different parts of the State by the researches of the lecturers, and of the farmers after they were put upon the track.

5. It would awaken a deeper interest in agricultural pursuits and give them increased respectability.

6. Opportunity might be given during the meetings of the institute for visiting some of the best conducted farms and gardens in the vicinity, and thus witnessing the operations of scientific principles.

I know of but two difficulties in the way of the immediate adoption of such a plan. One is, that as yet we have no secretary to the board, an indispensable prerequisite. Another is, that we have no pecuniary means placed at our disposal for any purpose. The first difficulty, I trust, will soon be removed, and for getting rid of the second, I take the liberty of suggesting that a petition be presented to the legislature, now in session, for the means requisite for establishing and putting in operation a farmers' institute (*36*).

In his first annual report, January 23, 1854, the secretary of the board, Charles L. Flint, said that it was believed that farmers' institutes would to a certain extent supply the want for agricultural education. Funds were needed to make a beginning of such institutes, and it was desirable that some provision should be made at an early day for this purpose.

In an address on "The farmer's wants" (*11*) before the Worcester South Society in 1855, Amasa Walker stressed "home education" through farmers' clubs with weekly meetings and an admission fee. Such clubs should (1) discuss agricultural matters among themselves, (2) purchase agricultural books which might be read and commented on at meetings, (3) establish a series of lectures on agriculture, agricultural chemistry and geology, and (4) conduct classes, especially of young farmers, for the study of agricultural textbooks. Women should be invited to attend the meetings of these clubs, and some subject, such as butter making, would be of special interest to them. The State would do well to give financial aid to the clubs. "In a few isolated cases, farmers' clubs have been formed and found successful." They should be in all the towns and "united into one grand and cooperative system of popular agricultural education, under the auspices and patronage of the State."

Speaking before the Barnstable Agricultural Society on October 8, 1857, George S. Boutwell (*19*) advocated the appointment of six

professors, presumably representing different branches of agriculture, who might be assigned to districts of 50 towns each, to visit farms, institute experiments, advise farmers, give lectures, and hold meetings of the nature of institutes. Each professor should be rotated from one district to another every year.

At a meeting of the Massachusetts State Board of Agriculture, January 18 to 21, 1858, a committee was appointed "to consider and report upon the propriety of instituting meetings similar to teachers' institutes, for the discussion of agricultural topics." The committee reported February 2 that "public meetings, under the direction and control of the board of agriculture, will best subserve this purpose." Let the board "assemble the farmers * * * bring them face to face with the science of agriculture * * * induce them to take an active part in these discussions and investigations." (*8*)

The board had already undertaken to disseminate information on agricultural subjects through the annual volume which was known as Agriculture of Massachusetts. The first volume appeared in 1854 (*39*). This report was first issued as a legislative document, but in 1856 by the action of the legislature was made an annual public document with an edition of 10,000 copies, of which 2,000 were for the use of the legislature. Special care was taken to distribute this volume so that people in the small and remote towns might have the information it contained.

In 1858 the board took action with a view to the publication and distribution of information in tract form and on February 4, 1859, voted to print from 200 to 2,000 copies of circulars on manures, renovation of pastures, grain crops, root crops, fruits, fencing, cattle husbandry, sheep, horses, diseases of vegetation, and market fairs. In 1860, 40,000 copies of a circular on the culture of grasses (*40*) were printed largely for distribution to teachers, "to be read publicly in schools and loaned out from week to week to be read in the families in the farming districts."

Beginning in 1859, the Hingham Agricultural Society, a local organization in Massachusetts, held meetings for many years at which agricultural topics were discussed; from 1860 these meetings were held every two weeks, except in the summer.

For several years beginning with 1857, the Massachusetts State Board of Agriculture discussed the advisability of holding public meetings in different parts of the State and finally, on January 15, 1863, voted that "an annual meeting for discussions and lectures, which leading agriculturists in the country shall be invited to attend, be held at such places in the Commonwealth as the board may designate, on the second Tuesday in December, and that a standing committee of three be appointed to make arrangements by providing lectures, etc., for such meeting." The first of these meetings was held at Springfield, December 8–11, 1863. There were discussions on the soils and agricultural resources of Massachusetts, farm crops, and sheep husbandry. Louis Agassiz lectured on the work performed by glaciers in preparing the soil of temperate regions for cultivation and also discussed cattle breeding; S. W. Johnson, of the Yale Scientific School, lectured on the application of manures; Secretary Goodale, of the Maine State Board of Agriculture, read a paper on dairying; Secretary Flint, of the Massachusetts board, read a paper on milk and butter making; E. W. Ball discussed grape cul-

which, according to the Manhattan Sentinel of November 28 (*30*), "there was a large attendance and the interest of the farmers was manifest. Several topics of practical value were discussed." Similarly well-attended institutes were held at the college annually from 1869 to 1874. After 1874 local institutes were held for many years under the auspices of the Bluemont Farmers' Club.

At a meeting of the trustees of Illinois Industrial University, November 18, 1868, a resolution was passed providing for a two-weeks course of "lectures and discussions" (*37*) and inviting the cooperation of practical farmers in this enterprise. This course was given January 12 to 22, 1869, and was attended by students of the university, citizens of Champaign, and farmers from various parts of the State. In opening the course Doctor Gregory, regent of the university, frankly stated that the precedent set by the Yale Scientific School in 1860 was being followed. The faculty was represented in this course by Professors Stuart, Baker, and Burrill, and there were lecturers from other parts of the State and from Missouri, including Norman J. Colman, then editor of the Rural World. Both the science and the practice of agriculture were discussed. Among the subjects presented were the relation of chemistry to agriculture, agricultural botany, the anatomy, physiology, and economy of plants, meteorology, soils, corn and other field crops, orchard and small fruits, cattle, horses, sheep, and agricultural bookkeeping. A report of the lectures and discussions was printed in full in an annual report of the board of trustees and in part in the report of the Missouri State Board of Agriculture. While the course was in progress it was suggested that similar work should be undertaken in different parts of the State. This was partially carried out in the winter of 1870 when four-day courses were given at Urbana, Centralia, and Rockford. On the second day of the first course in 1869, M. L. Dunlap, a member of the board of trustees greatly interested in agricultural education, in calling the meeting to order, designated it as the "farmers' institute," and at his suggestion a chairman and a secretary were appointed. However, this title was not otherwise applied to this course, which was officially known as "lectures and discussions" on agriculture.

The Missouri State Board of Agriculture was organized under a State law in 1865 and held annual meetings. These soon developed into a kind of farmers' institute at which there were papers and addresses by prominent farmers and scientists. Norman J. Colman was an active and influential member, and Charles W. Murtfeldt was corresponding secretary. At the request of Mr. Murtfeldt a resolution was introduced by Mr. Colman, September 9, 1869, "That the board approve of the suggestions of the corresponding secretary of holding 'farmers' institutes,' and the members of this board pledge themselves to aid every such effort by general attendance and active participation whenever it shall be possible for them to be present" (*43*). The immediate objection was made that the funds of the board were insufficient for such a purpose, especially since the railroads were not liberal in giving free transportation. Mr. Colman admitted that he doubted the success of this movement under existing circumstances. However, "these institutes would be an immense benefit to the agriculturists. Let the farmers

be called together and lectures delivered to them by men well learned in agricultural science, like teachers' institutes." The resolution was adopted, and afterwards a committee, of which Mr. Colman was a member, was appointed to see railroad officials to try to persuade them to adopt a liberal policy in relation to the work of the board. No meetings were held under this resolution.

In Iowa farmers' institutes were initiated by the State agricultural college in 1870. President Welch in a report to the trustees describes the beginnings of this movement as follows:

Many of the trustees will remember that last fall an urgent demand was made outside the institution for a winter session. Such a session, however, was for reasons well known to you found to be impracticable. It is now thought to promise better results to the farmers, that farmers' institutes somewhat similar in method to the teachers' institutes, should be held by a few of the older members of the faculty in different sections of the State. We propose that each institute shall last five days, and that its program shall consist of lectures for day and evening sessions, on stock breeding and management, fruit culture, farm accounts, and kindred topics. The first farmers' institute is already appointed in Cedar Falls, to open on the 20th instant (December, 1870); the second is to commence on January 3, at Council Bluffs, in response to an earnest invitation from the farmers of that county; and the third will be held in Muscatine, by desire of its citizens; time not fixed. A fourth may be held in Boonesboro or Ames. Now it is desirable that this new experiment should be tried without much expense to the farmers in attendance, and if the trustees should see fit to appropriate a moderate sum for traveling expenses it would, I have no doubt, be wisely expended. Professor Jones, Professor Matthews, and myself will conduct the exercises (*30*).

A committee to which the president's report was referred stated that—

In regard to the farmers' institutes, without hesitation we entirely coincide with the president's plans, and believe that great good will result therefrom, and most earnestly desire that a sufficient amount may be appropriated to defray the necessary expenses thereof (*30*).

The experiment of holding such meetings was sufficiently successful to warrant the college in publishing, in February, 1871, the following prospectus:

Farmers' institutes.—At least three farmers' institutes will be held in different parts of the State during the winter vacation.

First farmers' institute opens December 19, 1871; second farmers' institute opens January 2, 1872; and third farmers' institute opens January 16, 1872.

These institutes will open on Tuesday evening and continue to Friday evening of the same week.

The sessions during the day will be occupied with lectures and discussions on stock breeding and management, fruits and fruit growing, farm architecture, farm engineering, farm accounts, raising of crops, etc.

Public addresses on subjects connected with agriculture will be given in the evenings.

A farmers' institute may be secured at any locality, in the order of application, by forwarding a written request to the president of the college signed by 50 farmers who desire to attend all the meetings.

It is expected that the current expenses of the lecturers will be paid by those in whose interest the institute is held (*30*).

In New Hampshire the State board of agriculture, established August 23, 1870, held the first of a series of "public meetings" (*30*) at Concord November 29 and 30 of that year. This was followed by a number of similar meetings at various points in the State during that and succeeding winters, but they were not called institutes until 1887.

A State act of November 22, 1870, created the Vermont Board of Agriculture, Manufactures, and Mining, consisting of the governor, the president of the State agricultural college, and six other persons appointed for a term of two years. Under this act the board was required to hold at least one business meeting each year and as many more as they deemed expedient, in which the people of the State would be invited to participate for the investigation and discussion of matters relating to agriculture, horticulture, manufactures, and mining. A sum not exceeding $2,500 was appropriated.

During the two years this board was in office nine public meetings were held in different towns of the State, at which the subjects of fruit culture, grass culture, practical agriculture, fertilization, education, manufacturing, and mining were presented by experts on the different subjects and thoroughly discussed by people present at the meetings (*30*).

The best farmers were much interested in these meetings, which increased in number and attendance, until in 1885–86 they were held in 64 places.

The New Jersey State Board of Agriculture was established under an act of 1872 which provided for lectures before the board at its annual or other meetings. This was soon supplemented by the organization of county boards of agriculture, some of which about 1875 began to hold meetings resembling farmers' institutes.

That year the East Tennessee Farmers' Convention held its first meeting at Knoxville. This organization, which is composed of farmers from a number of counties, has since operated in connection with the college of agriculture of the University of Tennessee and is still in a flourishing condition.

In Michigan some members of the faculty of the agricultural college, influenced by the example of the Illinois Industrial University, held a conference in 1875 and decided to make an attempt to hold farmers' institutes. Professors Kedzie, Beal, and Carpenter were appointed a committee to perfect plans and to get the approval of the State board of agriculture, which was the governing board of the college. The board was sufficiently interested to make a small appropriation for this purpose. Beginning January 11, 1876, institutes were held at Allegan and Armada by members of the faculty, with sufficient success to warrant the continuance of this enterprise. For the next 12 years six regular institutes were held annually, and each member of the faculty was expected to attend two institutes each year. Arrangements for the institutes were made by the secretary of the college and members of the faculty.

The preliminary correspondence was carried on by the secretary, and after the places for the meetings had been determined each of the institutes was placed in the hands of a member of the college faculty, whose duty it became to "work up" the meeting. As a rule, the places were visited, and at a preliminary meeting a local committee was appointed to take charge of the arrangements for the meeting. Topics were selected for the State speakers, and local talent enlisted to furnish one or more papers for each session, as well as music and recitations. The conductor also looked after the itinerary of the State speakers and saw that hotel accommodations were secured and that proper local arrangements were made (*30*).

Beginning in 1877 with $500, the legislature made a biennial appropriation of $600 until 1889, when it was increased to $1,500, which permitted an expansion of the work. The average expense

for each institute was $50. The farmers at each place where the institute was held furnished the hall and did most of the advertising.

In Nebraska two years after the opening of the University of Nebraska, and before any students had begun to take the regular course in agriculture, Allen R. Benton, chancellor of the university, in his report for the year ended June 25, 1873, suggested "the feasibility of holding institutes in various parts of the State during the winter season. * * * As a beginning it might be profitable to have such an institute at the university building."

During the winter of 1873–74 farmers' institutes were held by Samuel R. Thompson, professor of agriculture, at Dorchester, Palmyra, Seward, and Lowell. Governor Furnas, Chancellor Benton, members of the university faculty, and others participated in these institutes. Professor Thompson also spoke on agricultural education that year at six teachers' institutes.

After the college had held institutes for several years with varying success, farmers' organizations began to assume the responsibility for managing these meetings locally. Sometimes they were called "farmers' club meetings." The Nemaha County Farmers' Institute Association was formed February 7, 1882, at a meeting attended by Professor Thompson and W. C. Culbertson, professor of horticulture. A similar organization was formed in Johnson County in October, 1882.

The Pennsylvania Board of Agriculture was created by a State act of May 8, 1876. It was composed of representatives elected by the 67 county agricultural societies, 3 persons appointed by the governor, and 6 members ex officio from the departments of the State government. These 76 men managed the institutes for about 18 years. The first institute under State authority was held May 22, 1877, at Harrisburg. Until 1885 the board had no specific fund for maintaining farmers' institutes, but used small sums from its general appropriation to pay the traveling expenses of lecturers. Otherwise the expenses of the institutes were paid by the several localities in which they were held.

The Pennsylvania State College in 1882 held a prolonged farmers' institute at the college, January 10 to 27, which resembled what is now called "farmers' week." The course consisted of 40 lectures by the college professors and outside agricultural specialists. Such meetings were held for three years and were then discontinued because the attendance was largely local, and such work interfered too much with the regular work of the small faculty.

The legislature in 1885 gave the State board of agriculture $1,000 for farmers' institutes. This was increased to $3,000 in 1887 and to $7,000 in 1891. That year 84 institutes were held.

In Alabama the State agricultural college encouraged the farmers to hold meetings for the discussion of agricultural problems. In an effort to excite interest in this matter J. S. Newman, professor of agriculture at the college, proposed an agricultural "revival" to be promoted through "camp meetings" (*12*). This plan was adopted by the Barbour County Agricultural Association, which announced that it would hold a camp meeting on the fairgrounds near Eufaula, July 10 and 11, 1884. Professor Newman, W. C. Stubbs, and P. H. Mell were among the speakers. "The farmers in at-

tendance are expected to hold love feasts, class meetings, and experience meetings, in which they will unreservedly swap ideas and compare experiences."

As the farmers' institute movement grew and attracted general attention among the farming people some farm papers were established which drew special attention to information regarding the institutes.

Among such papers were the Farmers Institute, published at Mason City, Iowa; Farmers Institute, published at Carbondale, Ill.; and the Farmers Institute Bulletin, published at Fayetteville, N. Y.

DEVELOPMENT OF FARMERS' INSTITUTES WITH STATE AID, 1880 TO 1900

Between 1880 and 1890 farmers' institutes or equivalent public meetings were established on a more or less permanent basis in 26 States. In 15 States, Alabama, Colorado, Connecticut, Illinois, Massachusetts, Michigan, Missouri, New Hampshire, New Jersey, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, and Vermont, the institutes were conducted by the State board of agriculture, usually with the cooperation of the agricultural college; in six States, Indiana, Oregon, South Dakota, Texas, West Virginia, and Wisconsin, they were managed by the land-grant colleges; in five States they were under various organizations, as follows: In Delaware, under county organizations; in Iowa, under the Iowa Association of Agricultural and Industrial Instruction; in Kentucky, under a voluntary Kentucky Farmers' Institute; in Minnesota, under a board of administration consisting of two regents of the University of Minnesota and the presidents of the Farmers' Alliance, State agricultural society, State horticultural society, and State dairymen's association; and in New York, under the State agricultural society.

In 1891 special State appropriations were available for the farmers' institutes in 14 States, as follows: Alabama, $3,000; Delaware, $600; Illinois, $10,200; Maryland, $5,000; Maine, $3,000; Massachusetts, $600 to $700 for each institute; Michigan, $750; Minnesota, $7,000; Missouri, $5,000; New York, $10,000; Pennsylvania, $7,000; Texas, $500; Vermont, $2,500; and Wisconsin, $12,000. In 10 States the State board of agriculture was contributing from its funds as follows: Colorado, $90; Connecticut, $200; Kentucky, $1,000; Nebraska, $100; New Hampshire, $1,000; New Jersey, $2,000; North Carolina, $250 to $500; Rhode Island, about $400; Tennessee, an indefinite amount; and Virginia, $500.

In Ohio in 1880 after an unusually successful State fair, N. S. Townshend and W. I. Chamberlain, secretary of the State board of agriculture, suggested that the work of the board for the promotion of agriculture be enlarged. At a meeting of the board held September 7, 1880, Mr. Chamberlain presented a plan for the new work, which included: (1) The holding of one or more farmers' institutes in each county, (2) the systematic collection of crop statistics and the issuing of monthly reports, and (3) inspection of fertilizers. The board approved this plan and appropriated $1,000 from the surplus derived from the State fair to carry it into effect. The original plan for the farmers' institutes provided that the board would send two

speakers, scientists or specialists in some branch of agriculture, for two days and one evening, to any county whose citizens would guarantee five things: (1) A hall, warmed and lighted, (2) music, (3) the help of local talent, (4) advertising, and (5) local expenses, including the hotel bills of foreign or State speakers. The board was to coöperate with county or other local agricultural societies or granges in calling and organizing the farmers' institutes or agricultural conventions during the fall and winter. It would be the duty of the secretary of the board "to attend and address such meetings, take part in the discussions, and secure in advance competent lecturers and speakers so as to increase interest, diffuse agricultural information, and help secure better results in agriculture all through our State" (*47, 1881*).

This plan was presented and approved at the thirty-sixth annual session of the Ohio State Agricultural Convention, January 5, 1881, at which societies from 71 counties were represented. That winter farmers' institutes were held in about 40 counties. Secretary Chamberlain, assisted by T. B. Terry and John Gould, corresponded with the local committees and arranged the dates, places, programs, speakers, and discussions. Eight professors from the Ohio State College took part in the institutes, having their traveling expenses paid by the college. Professor Cook, of the Michigan Agricultural College, *and two professors from Oberlin College also delivered some lectures.* Women attended these institutes in considerable numbers, and some of them read papers. Mr. Terry in later years told interesting anecdotes illustrating the hardships endured by the lecturers in "boarding around" and in their efforts to get audiences, though sometimes the available halls would not hold the people who came to the institutes. To meet the local expenses it was often necessary to charge an admission fee or to take a collection.

The institutes and the other enlargements of the work of the State board of agriculture soon gained sufficient popularity to result in an annual State appropriation of $5,000. The number of institutes was increased until 81 were held in 1887–88. Under a State act of April 26, 1890, the institutes were put on a more permanent basis. This act provided for the creation of incorporated societies, called farmers' institutes, in the several counties. Three such societies might be formed in a county. Their constitutions and by-laws must conform to regulations established by the State board of agriculture. Where such societies had held institutes and these were properly certified by the board, not to exceed $200 from county funds might be applied to the payment of the expenses of the institutes. Two-fifths of this amount was to go to the State board for the payment of per diem and expenses of speakers appointed by the board and three-fifths to the local societies for their expenses. These funds were to be raised by a tax of 3 mills per capita in each county. The State board must provide at least two speakers at each institute and at the close of the season publish such lectures and papers from the institutes "as may seem of general interest and importance to the farmers, stock breeders, and horticulturists of the State."

Under this act the board continued its arrangements with the counties on the same general plan as before but required that the institute societies be nonpartisan and nonsectarian. No fees for ad-

mission to the institutes were allowed, but the societies might have fees, subscriptions, and donations for their other meetings. They must report to the secretary of the board the cost, attendance, speakers, and other details relating to the institutes within 10 days after their close, and during the session must decide by vote whether or not the institute should be held the following year. The result of the vote must be included in the report to the board.

The number of institutes annually held increased immediately, and in 1895–96 there were 157 in 87 counties. The legislature on April 27, 1896, increased the per capita allowance to 6 mills and divided it equally between the State board and the local societies, limiting the amount available to any county to $250. The next winter, for the first time, a total of 212 institutes was held in the 88 counties of the State. The number increased gradually until in 1903–4 there were 247 institutes. Independent institutes were also held, many of which failed to make reports, but those reporting increased from 8 in 1892 to 30 in 1904.

The State farmers' institute held its first session in Columbus, January 11, 1887, and thereafter met for two days each year at the time of the annual meeting of the State board of agriculture.

These institutes have always been well attended by the farmers, horticulturists, and stock breeders of the State. During their continuance no county institutes are held, thus giving all interested an opportunity of attending, and they prove most successful, both in point of numbers and interest. Nearly all the institute lecturers in the employ of the board attend these State meetings and add materially to their interest and value (*30*).

In 1885 an important development in the farmers' institute movement occurred when the Wisconsin Legislature passed a bill introduced by C. E. Estabrook, of Milwaukee, which carried an appropriation of $5,000 annually. As amended in 1887, this act reads as follows:

SECTION 1. The board of regents of the State University is hereby authorized to hold institutes for the instruction of citizens of this State in the various branches of agriculture. Such institutes shall be held at such times and at such places as said board may direct. The said board shall make such rules and regulations as it may deem proper for organizing and conducting such institutes and may employ an agent or agents to perform such work in connection therewith as they may deem best. The course of instruction at such institutes shall be so arranged as to present to those in attendance the results of the most recent investigations in theoretical and practical agriculture.

SEC. 2. For the purposes mentioned in the preceding section the said board may use such sum as it may deem proper, not exceeding the sum of $12,000 in any one year, from the general fund, and such amount is hereby annually appropriated for that purpose.

SEC. 3. This act shall take effect and be in force from and after its passage and publication (*31*).

Under the original act the farm committee of the university board of regents appointed as superintendent of farmers' institutes, William Henry Morrison (1837–1893), a native of Yorkville, Oneida County, N. Y., who had settled in Wisconsin in 1859. An office in the capitol at Madison was assigned to him, and he was given almost absolute power to organize and manage the institute system.

Mr. Morrison had experience as a farmer, county superintendent of schools, and secretary of the well-known Walworth County Agricultural Society, whose annual fairs have become celebrated throughout the State and country. His good judgment and remarkable organizing ability rapidly brought the Wiscon-

sin system of institutes into such good working order that other States and Provinces, formulating systems for themselves, drew upon Mr. Morrison very largely for their plans (*30*).

Mr. Morrison was succeeded by George McKerrow, under whom the Wisconsin institutes were developed on a larger scale.

Under the Wisconsin system the superintendent arranged the programs, selected the lecturers, did the advertising, and, in general, controlled the affairs of the institutes. The meetings resembled schools, at which people assembled to ask questions and receive information and instruction on the subjects presented to them. The places for holding institutes were selected as a result of petitions signed by farmers and business men, in which they agreed to provide a free hall and to attend to the local details without expense to the State. The meetings were thoroughly advertised by sending out posters and programs and by notices in the local papers. The superintendent also wrote personal letters to farmers, inviting their cooperation in making the institutes a success.

The Wisconsin institutes were, however, actually managed by farmers. The superintendents were practical farmers and the workers were chosen largely from the best farmers in the State. The farmers in the several localities asked for the institutes and had a direct interest in these meetings. Professor Henry and other members of the agricultural faculty of the State university and specialists from other States took part in the institutes. Partly to stimulate his workers and partly to make a permanent record showing the character of institute work, Superintendent Morrison began to hold annual round-up institutes, the proceedings of which were published and widely distributed. The first meeting of this kind was held at Green Bay March 28 to 30, 1887. The business transactions, copies of papers read, and discussions at the sample institute were published as Wisconsin Farmers' Institutes, 1887, Bulletin No. 1 (*57*). This was a book of 230 pages, with two illustrations of the buildings of the University of Wisconsin. There were also 58 pages of advertisements. The edition totaled 31,000 copies. Similar bulletins were thereafter issued annually, and by 1896 the edition had increased to 60,000 copies.

Eight thousand cloth-bound bulletins are turned over to the superintendent of public instruction to be placed in the school district libraries of the State. The balance of them are distributed at the institutes and through the local press, creameries, cheese factories, farmers' clubs, agricultural societies, farmers, and business men (*30*).

The miscellaneous character of the information given out through the Wisconsin institutes, which in this respect were much like those held in other States, is shown by the following list of topics of papers published in the first bulletin: Clover, recuperative agriculture (I. P. Roberts, of New York), beekeeping, sheep, poultry, thought and application in farming (W. D. Hoard), horses, swine, experiments in hog feeding (W. A. Henry), mixed farming, Galloway cattle, taxes, Does knowledge pay?, cattle, principles of breeding, the family cow, corn, fruit, silo, silage, roads, dairying, and agricultural education. Women had a part in the Wisconsin institutes from the first. Their papers in this bulletin were on butter making, the dairy, fastening ends and binding edges, and education of farmers' daughters. During the first two years an average of 44 institutes were held.

This number was increased to 70 during the next 7 years and by 10 years thereafter to 112.

The following statements regarding methods used in conducting the Wisconsin institutes are based on data furnished the Office of Experiment Stations in 1905 by Superintendent McKerrow:

Midwinter fairs under the local management are held in connection with many of the two-day winter institutes where prizes for products of the farm and home, varying in amount of premiums from $10 to $2,500, have been offered. Where properly managed this fair feature adds very much to the interest.

The methods followed in conducting Wisconsin institutes partake both of the features of a school and of a conference. A petition, signed by farmers and business men, is sent in to the management, in which they proffer a free hall and agree to look after the local details without any expense to the State fund. The institutes are located by the superintendent by selecting from the places making application in such a manner as to best cover the entire State. These meetings are thoroughly advertised by sending out posters and programs and by notices through the local press.

The winter meetings are two days each. Upon the first day three sessions are held and but two upon the second day. The evening session, which is held the evening of the first day, is devoted to educational topics, in which the school officers usually take part with the institute workers.

In attending each meeting the conductor of the corps of workers impresses upon the farmers the fact that it is their meeting and that they are expected to take an active part in all the discussions.

The speakers give an opening lecture of from fifteen to twenty minutes in length which is followed by a twenty to thirty minute discussion, the greater part of which is devoted to asking questions by the farmers, and to brief, pointed answers to the same by the institute workers, with an occasional short statement of experience and experiments by those present.

The conductor at each meeting promptly shuts off all partizan political discussions or statements based on ignorance, prejudice, or superstition. Charts are used extensively in all discussions. Models and animals are also sometimes used.

A stock-judging institute was held a few years ago under the direction of the superintendent of farmers' institutes at the Waukesha County Fair, since which time several counties have adopted the plan and require the judges to briefly state the reasons for their awards.

All meetings are reported to the superintendent by the conductors in charge. The reports of each meeting aim to give a general view of the agricultural conditions of the section in which the meeting is held and are made upon uniform blanks furnished to each conductor for the purpose. One object of these reports is to aid the superintendent in planning future work in the same district (*30*).

Under the title of "cooking schools" separate sessions for women were sometimes held, at which the nutritive value of different foods was explained and methods of preparing various viands were demonstrated. These sessions required a separate hall and dishes in which the products of the cooking might be sampled by the audience.

Since 1895 from 10 to 16 one-day institutes have been held in the timber districts of central and northern Wisconsin, where farmers are making homes by clearing up the timberland that has been logged over. These meetings have been very successful and in great demand, and we believe have done much toward developing better methods of farming, better bred livestock, and the dairy industry in particular. Many cheese and butter factories have been established as the results of these meetings.

The farmers of Wisconsin at first were suspicious of the farmers' institutes, looking upon them as a political move or an advertising medium for stock breeders or for the agricultural college and the State university, and quite often spoke of the institute workers and speakers as theorists. This spirit has been entirely overcome by the employment of practical farmers as institute instructors, until now the farmers of Wisconsin have full confidence in the institute and its teachings (*30*).

In Minnesota the beginning of farmers' meetings analogous to farmers' institutes was due to the efforts of H. E. Hoard and his associates in the Northwestern Dairyman's Association. Such meetings were begun in 1884 and the following year an unsuccessful attempt was made to obtain an annual State appropriation of $5,000 for farmers' institutes. In 1886 Edward D. Porter, professor of agriculture in the University of Minnesota, formulated the plan of going out among the farmers and holding meetings in the hope that they might manifest sufficient interest in the agricultural course at the university to send their sons to attend it. He persuaded the agricultural committee of the board of regents to appropriate $1,000 for farmers' institutes, and 31 were held that year, largely in connection with county fairs. The principal speakers at these institutes were Professor Porter and O. C. Gregg. The latter had previously held meetings in the open air near the cattle sheds at county fairs, at which dairying and the dairy cow had been discussed. In February, 1887, Mr. Hoard, then a State senator, introduced a bill in the Minnesota Legislature providing for the continuance and maintenance of farmers' institutes. As passed, this act gave the institutes $7,500 annually, which was increased in 1889 to $10,000. The institutes were to be conducted under the direction of a board of control of nine members, including the president and the secretary of the board of regents, representatives of the State agricultural society, the State dairy association, and the State Farmers' Alliance, and the president of the State horticultural society. They were to appoint a superintendent of farmers' institutes and define his duties. In April, 1887, Mr. Gregg was chosen superintendent and served in that capacity 20 years. He was given full authority to manage the institutes, with the understanding that he would consult with the board regarding the times and places for the institutes, make reports regarding their progress, and account for the money used to maintain them.

Summer and winter circuits for two-day institutes were established. From the first the attendance of farming people at these institutes was large. Dairy husbandry and the manufacture of dairy products were prominent in the discussions at these meetings. At least one address on the work of the agricultural college was made at each institute. In 1890 instruction in cooking and the balanced diet was introduced.

In New York the farmers' institute movement was inaugurated in 1885 by I. P. Roberts, of Cornell University, and J. S. Woodward, of Lockport, N. Y.

After consultation with President Adams, of Cornell University, such a meeting was called to be held in Morrill Hall, February 16, 17, and 18, 1886. Both Professor Roberts and Mr. Woodward were tireless in their efforts to advertise this meeting thoroughly and make it a success, and the result far exceeded their most sanguine expectations. Over 100 names appeared on the register of persons attending the institute, not only from New York, but from adjoining States, and at most of the sessions between 200 and 300 people were present so that after the first session the meeting had to adjourn to Library Hall, in Ithaca. The meeting consisted of six sessions and 18 addresses, "some of which were longer than the management expected," which seriously interfered with the time desired for discussion, although the audience entered into the spirit of the meeting and, so far as time allowed, the subjects were discussed very freely. At the close of the meeting all declared that the first institute

in New York State was a success, and it was decided that such a meeting "should be held every year."

A more important resolution adopted, however, was one asking the New York State Agricultural Society, which was then the center around which all agricultural work in the State rotated, "to undertake the work of holding a limited number of farmers' institutes the next winter, and, in case they refused, to petition the legislature for a State department of agriculture to carry on this work."

When the question of their undertaking to hold farmers' institutes was first presented to the State agricultural society, a large number of the most influential members were strongly opposed to attempting the experiment. After a long and strenuous session, however, through the zealous efforts of a few who saw the possibilities of the institute movement, the majority decided to make the trial, and at a meeting of the executive board held in Utica in September, 1886, it was decided to hold at least three institutes that winter, and $1,050 was appropriated from the funds of the society for this purpose. A committee consisting of James McCann, president of the society; T. S. Harrison, secretary; Maj. Henry E. Alvord, and J. S. Woodward was appointed to look after this work.

At the annual meeting of the society in 1887, largely because of the strong advocacy of the institute work and his untiring efforts to make these meetings a success, J. S. Woodward was elected secretary, and from that time until 1890 was practically director of farmers' institutes in New York State, acting under the direction of an institute committee. To him more than to any other one man is due the great success of these early institute meetings.

After careful planning the institute committee found that they could hold five institutes during the winter of 1887 with the money at their disposal. All these meetings were very largely attended and great interest was shown in the addresses and discussions (*30*).

Among those responsible for the success of the institutes were Josiah K. Brown, the first dairy commissioner of New York; Professor Roberts, who gave much time to this work; E. Lewis Sturtevant, then head of the State experiment station at Geneva; and Henry E. Alvord, then in charge of the experimental work at Houghton farm in Orange County. A great demand arose for institutes in all parts of the State, and this led the State agricultural society to petition the legislature for an appropriation to carry on the work. In March, 1887, the Wemple Bill was passed, appropriating $6,000 to be used by the New York State Agricultural Society in holding farmers' institutes in various parts of the State. During the winter of 1887–88, 20 institutes were held and approximately 40 the following year. In 1890 the appropriation was increased to $10,000.

During the decade ending 1899 the farmers' institute movement spread throughout the United States. In Bulletin 79 of the Office of Experiment Stations, by L. H. Bailey, it is reported that institutes were held that year in 47 States.

In most of the older States the institute movement has passed its experimental stage, and is so well grounded in public opinion and policy as to be a recognized part of governmental machinery. * * * The greater number of instances in which governmental control obtains are in the older States; and it is in the older States that the machinery of governmental bureaus was likely to have been well established before the colleges became thoroughly intrenched in public opinion (*17*).

In 16 States the institutes were connected with a State department of agriculture, as follows: Connecticut, Kentucky, Louisiana, Maine, Massachusetts, Missouri, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, Vermont, and West Virginia; and in three, Delaware, Illinois, and

Iowa, with county organizations. In 19 Southern and Western States the institutes were directly under the auspices of the agricultural college or experiment station, as follows: Arkansas, California, Colorado, Florida, Georgia, Indiana, Kansas, Maryland, Michigan, Minnesota, Mississippi, Montana, Nebraska, Oregon, South Carolina, Tennessee, Utah, Washington, and Wisconsin. In Arizona the institutes were under the Arizona Agricultural Association; in Texas they were under local control; in Virginia farmers' clubs held institutes; in Nevada, New Mexico, and Wyoming institutes were not yet organized.

About $150,000 of public funds were used in farmers' institute work in the United States in 1899. The eight States having the largest appropriations were: New York $20,000, Ohio $16,346.72, Illinois $15,650, Minnesota $13,500, Wisconsin $12,000, Michigan $5,500, Indiana $5,000, and Vermont $5,000.

From statistics compiled by the Office of Experiment Stations it is estimated that about 2,000 institutes were held during 1899 with a total attendance of over 500,000 farmers.

In Wisconsin there are now annually held 120 institutes, with an attendance of over 50,000 persons; in Massachusetts 125 institutes, with an attendance of about 11,000 farmers; in West Virginia over 60 institutes, with a total attendance of 14,000; in Minnesota 50 institutes, of two or three days each, with an attendance at each of from 300 to 1,000; in Indiana 100 institutes, with an attendance of over 25,000; in Kansas 135 institutes, with a total attendance of 20,000; in Michigan institutes in nearly every county, and a total attendance reported to reach 120,000; in Nebraska 60 institutes, with a total attendance of over 26,000; in Pennsylvania about 300 institutes, with a total attendance of over 50,000; in Ohio 250 institutes in 88 counties, with an aggregate attendance of about 90,000; in New York over 300 institutes yearly, with a total attendance of about 75,000; in California about 80 institutes annually, with a total attendance of 16,000 (*17*).

Directors or superintendents of farmers' institutes were special officers in Illinois, Maryland, Michigan, Minnesota, New York, Pennsylvania, South Dakota, West Virginia, and Wisconsin.

As the farmers' institutes developed and funds became available for holding them regularly it was necessary to employ a special force of paid lecturers to supplement those who came from the agricultural colleges and experiment stations. These special lecturers were often farmers or horticulturists.

Women were encouraged to take part in the institutes, and the number of women lecturers gradually increased. Then special sessions for women were organized. In 1903–4, in New York, school children were specially invited to attend, and programs were arranged for them. About the same time prizes for exhibits by young people were offered by the institutes in Indiana, where it had become customary to have exhibits of culinary, dairy, and cereal products. In some States such exhibits were organized as local fairs held at the same time as the institutes. About 1904 special institutes for negroes were begun in North Carolina. In 1899 "normal institutes" for farmers' institute workers were held at Ithaca and Geneva, N. Y., and the period covered was extended to one week in 1903.

Generally the local arrangements and expenses were taken care of by the local communities, which provided a hall and advertised the meetings in the press and through posters, notices in schools, churches, and in meetings of farm organizations. In a number of

(*13*) was commended by K. L. Butterfield as a matter to which ultimately efforts must be directed.

At this meeting the relation of farmers' institutes and college extension work to the Department of Agriculture was briefly discussed, and Mr. Butterfield suggested pecuniary aid by the National Government to land-grant colleges for agricultural extension work.

At the third annual meeting, held at Omaha, Nebr., October 4–5, 1898, only a few States were represented, and it was thought that the association was organized on too narrow a basis. Therefore, at the fourth meeting, at Rochester, N. Y., March 29–30, 1899, with a considerable attendance of lecturers and others interested in the institutes, the name of the association was changed to American Association of Farmers' Institute Workers.

At the meeting of the association at Buffalo, N. Y., September 18–19, 1901, it was brought into much closer relations with the United States Department of Agriculture, through its Office of Experiment Stations, and these relations were afterwards strengthened by the appointment of Professor Hamilton as farmers' institute specialist in that office. He also was made secretary of the association. From this time the meetings of the association were more largely attended, and a wide range of subjects relating to the organization and work of the institutes throughout the country was discussed.

The broader scope of the organization of the association is shown in its amended constitution as it existed in 1905, in the following paragraphs:

Article III. Membership.

Any active worker in the farmers' institutes in the United States and Canada may become a regular member of this association on payment of the annual dues and is entitled to one vote. A delegate member representing the State farmers' institute organization shall be admitted from each State and Province, on compliance with the by-laws, and shall be entitled to cast five votes on any question: *Provided*, That the annual membership dues of the person shall be $1 and that of the State $5. Also, the United States Department of Agriculture and the Office of Experiment Stations of that department shall each be entitled to representation in the association, with the full privileges of delegate membership.

Article VII. Associate Members.

Honorary members of this organization may be elected from time to time upon the presentation of their names by some member of the association and upon their receiving the votes of at least two-thirds of the members present.

Article VIII. Powers of Honorary Members.

Honorary members shall be entitled to sit in all of the sessions of the association and to take part in all discussions, but shall have no vote (*13*).

A consolidated account of the Watertown and Chicago meetings was published by the secretary in 1897, and this officer also issued the proceedings of the Columbus meeting. No report of the Omaha meeting was published. The proceedings of the Rochester meeting were published in the Fifty-eighth Annual Report of the New York State Agricultural Society. Those of the meeting at Delavan, Wis., in 1900, were published in the annual bulletin of the Wisconsin Farmers' Institute. Beginning with 1901 the proceedings of this association were published by the Office of Experiment Stations of the United States Department of Agriculture. This was continued through 1912, after which the association resumed such publication. After the passage of the Smith-Lever Act the maintenance of a

separate national association to represent the institutes became increasingly difficult because (1) work formerly done by farmers' institutes was now included in the extension programs of agricultural colleges and (2) the management of the institutes in several States was transferred from the department of agriculture to the agricultural colleges. The American Association of Farmers' Institute Workers therefore came to an end with the meeting held at Chicago in 1919. No proceedings were published after 1917.

THE FEDERAL FARMERS' INSTITUTE OFFICE

From its establishment in 1888, the Office of Experiment Stations recognized the importance of the farmers' institutes as agencies for the dissemination of the practical results of agricultural experimentation. Early in 1889 it began the collection of data regarding the legislation, organization, and work of the institutes. In his report for that year Director Atwater stated that the results of this inquiry show that—

> what the farmers' institutes are now doing with great success is largely an extension and development of the work done by various organizations, such as boards of agriculture, agricultural societies, farmers' conventions, farmers' clubs, and agricultural colleges and experiment stations, for many years over a large portion of the country. The movement is one of the most encouraging features of the agricultural and intellectual progress of our times.

That report also contained a list of the States in which institutes were held, with the addresses of State officers in charge.

Secretary of Agriculture J. M. Rusk also called special attention to the institutes in his first annual report, which was for the year 1889. He referred to a bill introduced in Congress appropriating Federal funds for a farmers' institute division in the Department of Agriculture and commented on the success of the institutes in Wisconsin, his own State. Continuing, he said:

> Experience there and in other States has fully demonstrated the extraordinary benefits arising from these institutes, and I am strongly of the opinion, without going into details as to the precise way in which aid to the movement should be furnished, the National Government, in pursuance of the policy so strongly marked out by the establishment of the agricultural colleges and experiment stations, should put it in the power of the Department of Agriculture to foster and encourage the work of the institutes in the various States and Territories. The institutes have been justly designated the farmers' colleges (*50*).

The bill (S. 3969) referred to by Secretary Rusk was introduced in the Senate February 15, 1889, by Mr. Spooner, of Wisconsin. It provided for a superintendent of institutes in the Department of Agriculture, who was to organize and conduct farmers' institutes annually in the several States and Territories. "Lecturers, conductors, and experts necessary to conduct not more than 400 institutes in one season shall be secured," and a bulletin of the lectures, discussions, and papers of each season was to be published and distributed widely. Cooperation with the States, which might increase the number of institutes, was included in this plan.

The early volumes of the Experiment Station Record contain references to the institutes, and in 1896 that journal issued an article on the history and work of the institutes, by A. C. True and F. H. Hall. Bulletin 79 of the Office of Experiment Stations, published in 1900

(*17*), contained a more extended history of the institutes, by L. H. Bailey.

The nation-wide expansion of the farmers' institute movement and the growth of somewhat similar work in foreign countries made it desirable to have a Federal agency for the promotion of this great enterprise for the benefit of agriculture and country life. At the Columbus meeting of the farmers' institute association in 1897 the following question was discussed: "What support should farmers' institutes have from the United States Department of Agriculture, and how shall such cooperation be secured?" This resulted in the adoption of a motion:

That the association at this time appoint a committee of three, consisting of the president-elect (John Hamilton) and two others to be appointed by the president-elect, the business of which committee shall be between the present time and the date of our next annual meeting to gather such facts as are obtainable and get in touch with the Department of Agriculture at Washington, and inquire thoroughly into the question of the feasibility and advisability of a relation and union, such as has been outlined either directly or indirectly with the Agricultural Department of the United States, and submit their report at the next meeting (*13, 30*).

W. C. Latta, of Indiana, and F. W. Taylor, of Nebraska, were members of this committee. A report was prepared, but lack of a majority of the members of the association at the Omaha meeting in 1898 prevented its presentation. The committee, after conferring with James Wilson, the Secretary of Agriculture, made the following recommendations:

(1) That the Secretary of the Department of Agriculture at Washington be requested to arrange for a division in connection with that department, to be known as the "Division of Farmers' Institutes," and to appoint a suitable officer who shall be in charge.

(2) That the Secretary of the Department of Agriculture be requested to arrange for the sending out of suitable scientific lectures to the several States to assist the State managers in the farmers' institute work.

(3) That the Secretary of the Department of Agriculture, through the officer of the Division of Farmers' Institutes, be requested to annually collect, compile, and publish statistics of the institute work conducted by the several States, and distribute such documents in the same manner as like publications are now distributed by that department.

(4) That a bill be prepared to be presented to the Congress of the United States providing for an appropriation to the several States for farmers' institute purposes, to be apportioned pro rata, according to the number of farms (farmers) in each State.

(5) That this bill shall provide that the moneys so appropriated shall be used exclusively in the payment of the salaries and expenses of competent instructors, and that each State receiving the benefits of this act shall appropriate out of the State treasury for institute purposes at least as much as is received from the National Government.

(6) That each State before receiving the benefits of this act shall appoint a State director of institutes, who shall have charge of the expenditure of these funds, and who shall report annually on the 30th day of June to the auditor-general of his State, and also to the Secretary of the Department of Agriculture at Washington, giving an itemized account of the expenditures for institute purposes for the preceding year, according to a form to be provided by the Secretary of the Department of Agriculture at Washington (*30*).

At the Rochester meeting in 1899 Mr. Butterfield, of Michigan, called attention to this matter and, at his suggestion, Messrs. Dawley, of New York, McKerrow, of Wisconsin, and Dye, of New Jersey, were appointed a committee to confer with the Department of Agriculture relative to the establishment of a bureau or the forma-

tion of some other plan to encourage farmers' institutes and agricultural college extension. The published proceedings of the association give no record of the work of this committee, but in 1901 the director of the Office of Experiment Stations appeared at the meeting at Buffalo, N. Y., and spoke on the relation of the United States Department of Agriculture to farmers' institutes. He stated:

Secretary Wilson is greatly interested in the farmers' institutes. We have already done a little in the way of publications on this subject, but we want to do a great deal more, and that is our intention and hope. In order to work we must have funds, and it is the intention of Secretary Wilson in his forthcoming report to urge that an appropriation be made at the next session of Congress for work in connection with the farmers' institutes. It seems to me that the department may properly do for this movement something like that which it is doing for the colleges and stations (*13*).

That year Secretary Wilson asked for an appropriation of $5,000 to enable the Office of Experiment Stations to aid in the promotion of farmers' institutes.

The appropriation was to be used in employing an officer who would devote his time and energy to this work, visit institute workers and advise with them regarding the ways in which the department might help the institutes, study the problems of institute management at home and abroad, and seek to shape the department's work for the institutes so that it might be most helpful to this enterprise. Some of the ways in which the department might help the institutes were pointed out, as follows: (1) By collating and publishing information regarding the institute movement at home and abroad; (2) by furnishing the institute workers with the department publications and information through correspondence; (3) by advising and assisting institute managers with reference to perfecting organization and strengthening the work in weak places; (4) by sending out lecturers to address representative institutes in different States on the work of the department; (5) in general, by acting through its Office of Experiment Stations as a sort of clearing house for the farmers' institute movement as it has done in the case of the agricultural experiment stations (*52*).

Finally, the appropriation act carried only $2,000 for such work. Part of this sum was used for editing and publishing the proceedings of the farmers' institute association and for the collection of statistics relating to institutes. The appeal to Congress for the fiscal year beginning July 1, 1903, was more successful. An appropriation of $5,000 was made and, in anticipation of this financial support, John Hamilton, of Pennsylvania, was appointed farmers' institute specialist in the Office of Experiment Stations, April 1, 1903. The duties of this officer as indicated in the appropriation act were as follows:

To investigate and report upon the organization and progress of farmers' institutes in the several States and Territories, and upon similar organizations in foreign countries, with special suggestions of plans and methods for making such organizations more effective for the dissemination of the results of the work of the Department of Agriculture and the experiment stations and of improved methods of agricultural practice (*52*).

Beginning with 1902 the Office of Experiment Stations published in its annual report an account of the progress of the institutes in the several States and Territories, together with statistics and other data relating to them. This form of publication was continued until 1913. From 1907 the extension work of agricultural colleges was included in this report, and from 1910 accounts were given of similar work in foreign countries, in continuation of the information given in Office of Experiment Stations bulletins on agricultural instruction in the British Empire and in continental countries, published in 1905

and 1906. At this time lantern slides were first prepared and distributed with outlines for lectures. Among the first of these were the syllabi and sets of slides on the care of milk, potato diseases, soil, profitable cattle feeding, and silage and silo construction for the South.

To create interest in more systematic instruction by the farmers' institutes, experts in various subjects prepared outlines of courses for movable schools of from one week to two months' duration. Such, for example, were the courses on cheese making by L. L. Van Slyke, of the New York (Geneva) Experiment Station; fruit growing by S. B. Green, of the Minnesota College of Agriculture; and cereal foods and their preparation by Margaret J. Mitchell. These were followed in 1908 by a circular on the form of organization, equipment, and method of instruction suitable to such schools.

It was the policy of the Office of Experiment Stations to deal with the institute directors in the several States and to aid them in all possible ways. The farmers'-institute specialist, therefore, made many visits to these directors and through correspondence kept in close touch with them and their work.

It was early apparent that a useful service could be rendered by educating the large body of institute lecturers who had had no special training for their work and whose knowledge of subject matter in agriculture was comparatively narrow and local. Through the directors, lists of the lecturers were obtained and published from time to time, and lecturers were shown how to obtain from the department and the experiment stations publications, illustrative material, and other aids. As new forms of institute organization and work developed in particular States, information regarding them was disseminated in publications or informal communications. Such publications, for example, were the circulars on farmers' institutes for women and for young people, issued in 1909 and 1910. State legislation relating to the institutes was followed, and summaries of pertinent laws were published. As secretary-treasurer of the American Association of Farmers' Institute Workers, Professor Hamilton built up interest in this organization and promoted its welfare. In May, 1909, John M. Stedman, of the Missouri College of Agriculture, was added to the force of the farmers' institute office and has continued to perform services in the interest of institute workers up to the present time.

The work of this office had been broadened to include work with various agencies for the promotion of agriculture and particularly with the rapidly growing extension departments of the agricultural colleges.

In 1904, two railroads in Iowa, cooperating with the agricultural college, ran special trains through a farming region to promote the use of better seed corn. The "corn special" was equipped with lecturers, charts, specimens, books, bulletins, and demonstration material. It stopped at stations where farming people were assembled to listen to lectures, witness demonstrations, pass through the train to view its contents, and receive publications. So much interest was aroused by this enterprise that by 1906 such trains had been run in 21 States in the West, East, and South. Their instruction and material had been broadened to cover a wide range of topics

adapted to the agricultural conditions of the several sections. In the spring of 1906, Professor Hamilton accompanied one of these trains through a part of Illinois. His published report on this method of agricultural promotion reads as follows:

> The train was furnished by the Illinois Central Railroad Company and consisted of a locomotive, baggage car, two coaches, one dining car, and a compartment sleeper. The company bore all of the expenses excepting the salaries of the lecturers, which were met by the University of Illinois. Although the country roads were deep with mud, the attendance at the stations at which the stops were made was all that could have been desired, ranging in number from 150 to 400. One day by actual count the attendance was over 3,500.
>
> Reports of similar manifestations of interest have come from other States in which these trains have been utilized. The novelty of the method has no doubt had something to do with the attendance, but there seems also to have been, as evidenced by the close attention given to the lecturers and by the questions asked, a real desire for information.
>
> Perhaps the most significant feature of this movement is the interest that the transportation companies are taking in agricultural education, or at least in the dissemination of agricultural information. In every instance prominent railroad officials have accompanied the trains, and have assured the farmers of their interest in promoting the welfare of farming people. This effort on the part of the railroads to improve agriculture is undoubtedly the beginning of the organization in the management of these companies of a corps of agricultural experts who shall devote their entire attention to the development of agriculture in its several phases, and also to assisting farmers in the marketing of their crops.
>
> A recent investigation by the institute specialist into what the railroad companies of the United States are doing in aid of agriculture discloses the fact that with few exceptions they are coming as never before to appreciate this source of traffic, and quite a number of companies have already begun the organization of departments for the aid and encouragement of this industry. One company has three expert specialists and two assistants who devote their entire time to instructing and otherwise aiding the farmers. This company also publishes a monthly magazine giving information with respect to farm lands and methods of culture. Another company has been instrumental in organizing fruit growers and truckers' associations at different points along its road, and issues printed circulars and bulletins of information respecting the agricultural advantages of the several localities through which the road passes. This company also employs experts to teach the trucker and farmer, and to oversee and assist him in his work. Some of these experts have had training in the agricultural colleges and experiment stations of the country, and others are commercial men of years of experience, who aid in marketing produce and assist by teaching the fruit growers and truckers how to grade, pack, and prepare their products so as to suit the peculiar demands of the various cities. This road has a soliciting freight agent in every northern city of any magnitude. The agent informs the fruit growers' associations and individual growers daily, and oftener if required, as to the exact condition of the market in the city where he is located. He advises of the arrival of the cars, the condition of the contents, and often gives the prices which were obtained for the consignment before the consignee reports the arrival of the car.
>
> Another company has distributed along its lines 800 purebred bulls and 6,000 purebred pigs for breeding purposes, and it also offers prizes for the best-managed farms in the several districts through which it runs.
>
> A western company has organized thirty-five farmers' institutes and truck-growers' associations. Another reports eighteen such organizations in its territory. In Texas the railroads have associated for the development of the industries of the State, and are encouraging and aiding the introduction of diversified crops, the improvement of the rural schools, and the construction of substantial highways in the country districts (*52*).

Following the progress of this movement, Professor Hamilton in 1910 made an extended investigation by correspondence with 103 rail-

road companies in the United States and Canada. The results of this inquiry were published in Circular 112 of the Office of Experiment Stations entitled "The Transportation Companies as Factors in Agricultural Extension" (*34*). That year 52 of these companies operated agricultural trains. The number of lecturers connected with 43 of these trains was 346, usually from the agricultural colleges, experiment stations, or State or national departments of agriculture. An attendance of 189,645 people was reported from 26 trains. This movement reached its peak in 1911, when 71 trains were run in 28 States, and the attendance was 995,220. In 1914 there were 34 trains in 17 States, with an attendance of 474,906.

For several years the running of such trains undoubtedly did much to arouse the interest of farming people in improved agricultural practices and in the work of farmers' institutes, agricultural colleges, and experiment stations. Unless followed up by continued personal efforts of extension agents or railroad officials, however, there was little practical result after the excitement caused by the agricultural train had died down. Therefore agricultural trains have been discontinued in recent years except to meet some emergency.

In 1910 the farmers' institute office made an extensive inquiry regarding the status of the 1,200 county-fair associations in the United States and their relation to the movement for agricultural education. This showed that these associations with their 250,000 members were doing considerable good through their exhibits, but might easily make their influence much greater by giving their exhibits and meetings a larger and more direct educational value and by eliminating certain objectionable features which tended to lower the social and moral standards of rural communities. To aid in redirecting and improving the work of these associations Professor Hamilton prepared an article on agricultural-fair associations and their utilization in agricultural education and improvement, which was published as Circular 109 of the Office of Experiment Stations (*23*).

When the extension work of the agricultural colleges became sufficiently important to attract the attention of the Association of American Agricultural Colleges and Experiment Stations, a standing committee on extension work was created in that association in 1905. This committee sought the cooperation of the Office of Experiment Stations, and Professor Hamilton was named to assist them. The committee chose him as their secretary, and from that time his office dealt quite regularly with matters relating to the development of the agricultural extension work of the land-grant colleges. This service will be more fully described in the chapter on extension work.

One feature of Professor Hamilton's work in which he was especially interested and which in his mind had a definite relation to the farmers' institutes may properly be considered here. Professor Hamilton realized the value of farmers' institutes as aids in the improvement of agricultural practices and household management, but he desired to supplement the institutes with work of permanent educational value. He knew that expert extension agents and teachers would for years be too few to carry agricultural education into rural communities generally, but he hoped to find in many rural communities persons of sufficient education and organizing ability to assemble small groups of people and give them worth-while instruction. He

proposed to supply these local leaders with definitely organized material for demonstrations, subject matter, apparatus, publications, illustrative material, and all necessary aids. A plan was made for a short course on this basis.

The State agricultural college through its extension department was to organize and supervise this course. The extension director, or his representative, would visit the community where the course was to be given, enroll not to exceed 15 persons who must all be over 17 years of age, assist in obtaining suitable rooms for the work, select the class leader, and order the necessary equipment from the college or other agency supporting the enterprise. Each course would cover but one subject and would be arranged to continue one week to two months, according as it was pursued in whole or in part. Each lecture, with its practicums, references to literature, and list of questions, would be so printed that copies could be given to members of the class after the leader had taught it, with such explanations as the local conditions might require. There would be only one lecture or part of a lecture each day, and the rest of the time would be occupied by the students in looking up references and performing the laboratory or field practicum. A quiz would be given by the class leader the next day before beginning another lecture. Each student was to be furnished with the apparatus needed for the practicums. The local expenses would be borne by the community in which the course was given, and the class leader would be paid by fees from the students. Written examinations would be given each week, the students' papers to be sent to the college for inspection and rating. At the end of the course an examination would be given by a representative of the college visiting the community for that purpose. Students completing the course satisfactorily would be given a certificate.

The local leader would go over the course with his class, keep its records, be responsible for property used by it, guide the students in their work, and deal with the college in matters relating to the course. Beyond his good judgment and such knowledge of the subject as he might possess, the success of the course would depend largely on the care with which the printed document furnished him and the students had been prepared to set forth clearly the subject matter, the requirements of the practicums, and the suggestions for the quizzes. Intensive training of class leaders on particular subjects might be given in summer schools at the college.

A small test of this plan was made under the supervision of Professor Stedman with a class in Pennsylvania. The agricultural colleges were, however, so burdened with the rapid expansion of their extension work in other directions and, after 1914, with the reorganization and development of this work under the Smith-Lever Act that it was not found practicable for them to undertake this new form of correspondence course and nothing further was done with it. The colleges have, however, continued to employ short courses or extension schools, usually of from three to five days' duration, as a part of their extension work.

Professor Hamilton retired from service January 1, 1914, and was succeeded by Professor Stedman. Information regarding the institutes in the United States and the extension work in foreign countries has since been collected by him and published from time to time. The office of farmers' institutes was continued in the States Relations

Service from 1915 to 1923, but as the institutes became a part of the cooperative extension system under the Smith-Lever Act the functions of this office were narrowed, and the work relating to them was incorporated with that of the Office of Cooperative Extension Work.

BROAD DEVELOPMENT OF THE FARMERS' INSTITUTES, 1900 TO 1915

With increasing State and Federal aid and with growing popularity among farming people, farmers' institutes broadened their work and extended their influence between 1900 and 1915. The general statistics of the institutes, as collected by the Office of Experiment Stations during this period, show the growth of this movement.

TABLE 1.—*Growth of farmers' institutes in stated years, 1902–1914*

Year	State, college, and other funds	Number of institutes	Attendance[1]
1902	$103,124	2,772	820,000
1907	284,450	3,927	1,596,877
1912	533,972	6,778	2,549,200
1914	449,882	8,861	3,050,150

[1] The aggregate number of persons at the several sessions of each institute.

While the two-day institute remained the standard form, in the sense that it was generally considered most satisfactory for the purposes for which these meetings were organized, yet the number of one-day institutes increased greatly. This was due partly to the growing popularity of the institutes and partly to the desire of the institute managers to make a good showing by distributing the institute funds among the several rural communities. On the other hand, the number of institutes continuing three or more days increased, showing that a considerable number of farming people desired more extended instruction on matters relating to their business than could be given in one or two days.

In 1904 there were 1,755 one-day institutes, 1,476 lasting two days, and 75, three or more days; in 1907 the respective numbers were 2,063, 1,784, and 80; in 1912 they were 5,328, 2,015, and 247.

The educational significance of farmers' institutes became increasingly clear, with the result that the general management of the institutes, which in 1903 was intrusted to the State department of agriculture or to a separate State board in 26 States and to the agricultural college in 21 States, was controlled 10 years later by the colleges in 28 States. The growth of the work required a stronger central organization, and by 1913 the officer in charge of the institutes had the title of director or superintendent in at least half the States.

The number of paid lecturers rose from approximately 850 in 1903 to 1,084 in 1907 and to 1,287 in 1914. Of these about 200 were officers of the agricultural colleges or experiment stations in 1903, 426 in 1908, and 528 in 1914. The records of the Office of Experiment Stations show that in 1907, of 1,287 institute lecturers listed as having at some time engaged in this work, 605 had a university or college degree, 108 had had one to three years in college, 113

had had a full or partial course in an academy, 138 had graduated from a high school, 7 had had a partial high-school course, and 306 a common-school course. Among the latter, however, were many who had specialized successfully in growing particular crops or breeds of animals or in some branch of horticulture.

The number of lecturers employed in the several States in 1914 ranged from 5 in Vermont to 93 in Massachusetts, 97 in New York, and 125 in California. From the colleges and experiment stations, there were 1 in Vermont, 31 in Washington, 39 in New York, and 40 in California. On the average, 2 or 3 of these lecturers attended each institute. Besides the paid lecturers, many relatively well-educated and successful farm men and women spoke at the institutes. As early as 1904 more than 3,300 such speakers were reported from 28 States, of whom, however, 2,550 were in 5 States.

The rapid growth of the body of scientific and technical knowledge of agriculture which took place after the establishment of the experiment stations at home and abroad made it increasingly difficult for farm people who spoke at institutes to give the kind of address which their more intelligent auditors demanded, unless they had some up-to-date information and training. For this reason there arose a necessity and a demand for some means of giving special training to institute lecturers. The States supplied these lecturers with experiment-station bulletins and other agricultural documents, and the Federal farmers' institute office sent them the publications of the United States Department of Agriculture. But something more than the reading of such literature, and agricultural books and papers was needed. Therefore attempts were made to bring institute workers together to receive oral instruction for at least one or two weeks. This was begun in New York in 1903, when a class of institute workers was assembled at the Geneva Experiment Station for one week and at Cornell University for one week. Between 1905 and 1909 similar normal institutes or conferences were held in Pennsylvania, Illinois, Indiana, Maryland, and West Virginia.

The "round-up" institutes, which had been begun in Wisconsin, served a somewhat similar purpose. In 1902 such annual institutes were held in 14 States. In some cases the attendance was confined to the lecturers; in other cases local managers of institutes were included, and sometimes the meetings were open to the farming public. Not only was instruction given by college and station officers and other specialists of the State in which the meeting was held, but by prominent lecturers and specialists from other States. They became a permanent part of the institute system. In 1913, 66 "round-up" institutes were held in 16 States, with an attendance of 122,400 persons. Short courses at the agricultural colleges in winter and in summer multiplied during this period, and the number of students in the degree courses also increased greatly. But with all the progress in the development of agricultural education, the lack of a sufficient number of well-trained institute lecturers continued.

In order to arouse interest in the institutes and to make suitable arrangements for holding them, it was early found desirable to have some kind of local organization. Advantage was therefore taken of existing farm organizations, such as county agricultural societies,

granges, and farmers' clubs. These, however, did not always function efficiently. Special forms of organization were therefore attempted, and in some cases, where State funds were available for the institutes, provisions for county societies or other organizations were written into the laws. In Office of Experiment Stations Bulletin 135 on legislation relating to farmers' institutes (*31*), published in 1903, laws of this kind are reported from 7 States, Delaware, Illinois, Iowa, Kansas, Michigan, Ohio, and Oklahoma. In 1904, some form of county institute organization was reported from 17 States and such an organization in a few of the counties was found in 5 other States. In Massachusetts, the State funds for institutes were allotted to county agricultural societies and some other organizations. In Rhode Island, the State board of agriculture was authorized to hold institutes "in connection with any society or association or other organization devoted to the same general objects."

In Pennsylvania it was made the duty of the superintendent of institutes "to confer and advise with the local member of the State board of agriculture, together with representatives duly appointed by each county agricultural, horticultural, or other like organization, with reference to the appointment of speakers and other local arrangements." In Minnesota there was much cooperation with farmers' clubs, of which there were more than 900 in 1914. The Illinois Farmers' Institute, which was the governing body for the institutes in that State, consisted of "three delegates from each county of the State, elected annually at the farmers' institute for said county."

The Michigan law provided for the organization of county farmers' institute societies by 20 or more residents of each county. The State board of agriculture ruled that any active county agricultural society might "be accepted as the legal institute society for that county" (*31*). The Ohio law allowed not to exceed four farmers' institute societies in a county, which might share equally in a tax of 3 mills for each inhabitant of the county. In Oklahoma 15 farmers might form a corporation, known as the county farmers' institute, which must hold its annual meeting at the county seat on the date set by the board of agriculture. The program must include "the discussion of matters pertaining to agriculture." In Kansas in 1914 the county-institute societies had 15,000 members.

At the meeting of the American Association of Farmers' Institute Workers in November, 1905, Professor Hamilton presented an elaborate plan for the organization of the farmers' institutes (*13*). This not only provided for a State board of farmers' institute directors and county-institute societies but also permitted the county societies to form township and district societies. In 1912, township associations were formed in Indiana with an executive committee of three men and two women and a membership fee of 25 cents a year. If there were at least 25 members in such an association the State college would send a speaker to its meeting. This plan also contemplated the formation of farmers' clubs in the several communities within the township.

In addition to the institutes held by the official State organizations there were the "independent institutes." They were organized and conducted by granges and other farm organizations, railroads, or other groups. Such institutes were held in 1908 in 16 States with

142 sessions. Two years later the same number of States had 517 independent institutes, with an attendance of 157,523, and in 1914, 1,643 institutes were held in 18 States, with an attendance of 345,509.

A great majority of the institutes have always had a miscellaneous program covering various agricultural and country-life interests. About 1905 some institutes were devoted to the presentation and discussion of a single subject. Such institutes often occupied from two days to a week. They grew rapidly in favor, were held in many States, and became a permanent part of the farmers' institute system. The subjects varied with the predominant interests of different regions and included such things as seed selection, corn judging, cattle judging, dairying, and various branches of fruit growing. In a similar way the special agricultural trains were often devoted to one particular subject. Members of the institute force accompanied these trains in many cases, and sometimes the institute director managed the program. As there developed an opportunity and desire for more systematic instruction, these meetings, with or without the trains, became in reality movable schools and were sometimes so designated. More frequently they were called "extension schools" or "short courses." In Maryland in 1908 the institute department of the agricultural college purchased a Pullman car which was equipped for itinerant instruction and demonstrations.

Students in various localities throughout the State were registered in advance and formed into classes, agreeing to attend all of the sessions of the course to be held in their several localities. The course consisted of six lectures upon leading agricultural subjects. During the intervals between lectures, farms, orchards, stables, and poultry yards were visited and inspected and expert advice given respecting their treatment. Visitors to the car were also met and the practical character of the exhibits explained. The schools were continued for one month on the line of the Maryland and Pennsylvania Railroad, having a total registered attendance of 1,714 (52).

The movable schools or extension schools held under the auspices of the farmers'-institute organizations increased in number until in 1911–12 there were 164 in 14 States, with an aggregate attendance of 137,669. Field demonstrations were also made a part of the institute work, beginning in one State about 1905, with one day in each two-day institute so utilized. In 1910, 69 field demonstrations were reported, and in 1914 they were conducted in 15 States. At an early day the farmers'-institute lecturers made addresses at farmers' picnics, and this form of institute service, as well as similar work at local and county fairs, became quite common. In 1912 addresses at 459 picnics, fairs, and conventions were reported. Sometimes institute organizations held picnics. Two States in 1905 called such meetings "summer institutes."

Before 1900, women speakers had taken part in the farmers' institutes in a number of States. In 1890, so-called "cooking schools" had been connected with the institutes in Minnesota, and this had made separate sessions for women necessary. The same plan was afterward adopted in Wisconsin. In Michigan a women's section was organized in 1895. In Illinois in 1898 a few women interested in the application of science to housekeeping decided that special subjects for farmers' wives ought to be presented at the county institutes. They therefore undertook the formation of a "domestic science association" in the several counties, which was to work with the men in these institutes.

The purpose of these organizations was twofold: (1) To teach the practice of better methods in homes; (2) to help to introduce domestic science into the public schools. Twenty counties were organized on this plan the first year, and five years later such associations were active in 90 counties. At first, meetings were held annually in connection with the county farmers' institutes, but soon the women formed study clubs, which met monthly or bimonthly, usually at the county seat, and because many women could not attend these meetings auxiliary neighborhood clubs were organized. Sometimes there were as many as eight of these in a county. The county associations were federated in the Illinois Association of Domestic Science, which held an annual meeting in connection with the State farmers' institute. The expenses of the women's sessions at the institutes were paid from the appropriation for the State institute, which also contributed a traveling library of 125 volumes on subjects relating to the home. These books were lent to the study clubs and through them to their members.

In the Province of Ontario, Canada, in 1899, G. C. Creelman, superintendent of farmers' institutes, which were under the supervision of the Agricultural College at Guelph, invited the wives and daughters of leading members of the farmers' institutes to form local organizations for holding women's institutes. A fee of 25 cents was charged for membership. The first organization was soon formed, and within two years, with the assistance of a woman organizer, 32 such institutes and a number of branches were formed in Ontario. The Government undertook to grant $10 a year to each women's institute that had 50 members, and 41 such grants were made in 1902. Meetings were usually held once a month either in a private home or a hall. Most of them were conducted by local talent, but sometimes they had an outside speaker on some subject in which they were particularly interested. Superintendent Creelman stated that in 1902, 307 meetings were held, 3,081 members paid their fees, 638 addresses were delivered or papers read, and 16,410 women attended the meetings. A separate report on the women's institutes was published, and a handbook was issued for use in their meetings. This movement continued to grow and spread into other Provinces. It also greatly stimulated farmers'-institute managers in the United States to provide more ample opportunities for women to engage in the work of the institutes. In 1903 the Office of Experiment Stations reported that institutes "especially for women" were held in 15 States and in 1908, that 21 States held women's institutes and that 7 others had women lecturers upon their regular force of institute speakers. In 15 States there had been 732 meetings for women and in Indiana 8 summer institutes for women and children.

In these and later reports, however, the term "women's institutes" was used to include sessions for women as a part of the program of the farmers' institute, as well as more or less separate meetings of women.

In Indiana a county organization, known as the "women's auxiliary organization for county institute work," was authorized by law to collect an annual membership fee of not less than 15 cents for each member, and when the president of the auxiliary made a verified report to the president of the county farmers' institute, the women's organization must be considered a part of the institute.

In 1908 women's sessions had been held in connection with the farmers' institutes in 27 counties, and in 1909 these auxiliaries existed in 41 counties. Within five years 87 of the 92 counties in the State were visited at least once by a trained instructor in home economics. The auxiliaries interested the rural women in labor-saving devices, better sanitary conditions, better methods of preparing and preserving foods, care of the sick, and beautification of the home. In some cases auxiliaries offered prizes for girls' culinary exhibits at the farmers' institute.

Oklahoma carried this plan somewhat further by giving such auxiliaries authority to organize and work separately from the farmers' institutes. If they annually collected at least 25 cents per member and reported their income and expenses to the county farmers' institute, a report of their work was included in the report of the institute, and they were entitled to a pro rata share of the county appropriations for the institute work.

Nebraska in 1908 had women's auxiliaries in 40 counties and employed three women lecturers. Colorado had five-day courses in home economics, given by three teachers. Before a course was granted, at least 100 women were required to register and pay a fee of $1, and the hall, fuel, and light must be furnished by the local community.

In Iowa in 1908–9 the home-economics workers in the extension department of the Iowa State College "attended 40 farmers' institutes and gave addresses on phases of home making and also acted as judges of baked goods and superintended girls' cooking contests. In some instances the women's session was held apart from that of the men, but as a rule the women met with the men and one session was devoted to home affairs" (27). In Michigan that year distinct sessions for women were held at institutes in 60 counties. There were 10 women on the force of institute lecturers. New York held 25 institutes for women in 1908, but the following year subjects of interest to women were included in all the institute programs and were treated by women lecturers, paid from the general appropriation for farmers' institute work. In North Carolina in 1908 there were 68 women's institutes in 46 counties, held on the same day and at the same place as the farmers' institutes, but in a separate hall. Usually two sessions were held which were addressed by women lecturers from the State office, and by men belonging to the corps of farmers' institute lecturers, who spoke on dairying, poultry, and gardening. During this year a train with a car fitted up as a kitchen with labor-saving utensils and devices was run through the State, and lectures and demonstrations in home economics were given wherever the train stopped.

In Pennsylvania at nearly every two-day institute one session was devoted to home economics. Both men and women were in the audience, but women had charge of the meeting. In Utah, 70 institutes for women were held, with an attendance of 4,549. Women also attended some of the joint sessions. A State law required the institute organization to provide institutes for women and to use public funds for this purpose.

Special institutes for women developed slowly and were confined to about one-fourth of the States. In 1911 the largest number of

such institutes, with the largest attendance, were in North Carolina, Wisconsin, and Michigan. The following year these States, with Oklahoma, Pennsylvania, South Carolina, Tennessee, and Utah, held 720 women's institutes, with an attendance of 78,776.

Special work for young people on the farms was begun in Macoupin County, Ill. (*14*) in 1900. When the adult farmers of that county did not respond to special efforts to get them to attend institutes, W. B. Otwell, president of the county institute, distributed carefully selected corn to 500 boys, who grew it and made an exhibit for prizes at the next institute. This was so successful that the next year 1,500 farm boys entered the contest. There was then no difficulty in getting a large attendance of boys and adults at the county institute. This kind of work was afterwards taken up under the auspices of the State college of agriculture, the Illinois Farmers' Institute, and the county institute secretaries, and county superintendents of schools in several counties in Illinois. In February, 1902, Supt. O. J. Kern, who was promoting the improvement of rural schools in Winnebago County, organized a farmer boys' experiment club in cooperation with the agricultural college. Sugar-beet seed was furnished by the college and seed corn by the State farmers' institute. The club began with 37 members, and in November, 1903, there were 405. Excursions were made to the agricultural colleges in Illinois, Iowa, and Wisconsin by a considerable number of these boys and their parents, attracting much public attention to this enterprise. Meetings of the club were held at various farms, a half day was given them at the county farmers' institute, and monthly lectures by college officers and others were provided at the county seat during the fall and winter. By 1904 the State superintendent of farmers' institutes estimated that not less than 2,000 boys were in the clubs in Illinois. Local clubs sometimes were formed, usually by townships, and united in a county association. When Mr. Otwell was put in charge of the Illinois agricultural exhibit at the St. Louis Exposition in 1904, he induced 8,000 boys in that State to grow corn for prizes, and 1,250 exhibits of their work received awards there.

In January, 1902, A. B. Graham, superintendent of Springfield Township schools in Clark County, Ohio, without knowledge of the club work in Illinois, organized a boys' and girls' club and arranged with the farmers'-institute committee at Springfield to make an exhibit of the results of their work at the farmers' institute. Corn was grown on small plats, and an exhibit of selected ears was made at the institute in January, 1903. Club meetings were held once a month in the assembly room of the county building. A few days before the meeting each boy was notified that certain subjects would be taken up, and he was requested to read certain pages on subjects assigned. In each school were a few of the best elementary texts on agriculture; these the boys had the privilege of taking to their homes and to the club meetings. Agricultural subjects were also taken up occasionally in the schools. The work of the clubs was broadened to include the growing of vegetables, testing of soils for acidity, and other work. In 1905 pressed weeds and leaves of forest trees, sections of common woods, mounted insects, corn, potatoes, beets, carrots, weed seeds, record books of club members, and other products were ex-

hibited. In June, 1903, about 100 of the pupils in these schools made an excursion to Ohio State University, where they were shown the equipment for instruction in agriculture and home economics and met President Thompson, Dean Hunt, and other members of the faculty.

Similar clubs were soon formed in other parts of Ohio, and by 1904 there was in this State a federation of rural-school agricultural clubs, under whose auspices printed directions and report sheets for the field work were issued by the agricultural student union of the State college of agriculture (see p. 46).

About this time the Texas Farmers' Congress organized the Farmer Boys' and Girls' League, which in 1904 had over 1,200 members. In Iowa the first boys' club was formed by the superintendent of schools, C. E. Miller, at Sigourney, Keokuk County, in March, 1904, and soon had 335 members. It held meetings, visited the State agricultural college, and conducted school fairs in 147 school districts and 16 townships (*126*).

The farmers'-institute organizations in other States soon began to foster such work either by aiding the schools or by directly undertaking it themselves. Special sessions for farm youth were held in increasing numbers at the institutes. In 1904, meetings of this kind were held in four States and the next year six States reported 167 meetings for boys, of which 92 were in New York. Girls were also brought into the club contests and institute meetings.

In 1907 sessions for boys and girls were held at 363 institutes in 8 States. In Kansas, 2,764 boys engaged in corn contests in 40 counties, 250 girls were listed in flower growing, and 150 girls in home gardening. In Illinois 60 counties were represented at the two weeks winter course at the college of agriculture by winners in corn-judging and bread-judging contests.

In 1909 the institute officers in 20 States and Territories reported special work for young people under their auspices or in cooperation with other agencies (*35*). In Georgia the farmers' institute, connected with the agricultural college, conducted clubs for boys and girls and held one or two institutes for them in each county having a club. In Illinois boys' encampments were a new feature. In Indiana separate sessions of the institutes were held for boys and girls, in addition to the clubs, which were organized in 45 counties. This work was financed by the county-institute associations which by law were authorized to use funds for awarding prizes. One county appropriated $1,000 for boys' and girls' institute work. In Kansas a man had been appointed to direct the institute work with boys, and a woman was appointed to conduct the home-economics work with girls. The boys and girls had been divided into two classes, one including those from 10 to 14 years of age and the other those from 15 to 21 years. In Michigan, besides the club work, the schools in fully 50 places where institutes were held were dismissed during the afternoon sessions which, together with the evening sessions, were made of special interest to boys and girls. In Minnesota 44 counties were carrying on the club work through the schools. The farmers' institute organization employed a special man during part of the year to make addresses at club meetings and do other work connected with their activities. In Mississippi the State farmers' insti-

tute, connected with the agricultural college, was cooperating with the farm-demonstration organization of the United States Department of Agriculture in carrying on club work. The boys and girls had meetings, usually separate from the farmers' institutes.

In Missouri three boys' camps had been held as a part of the club work. In Nebraska the farmers'-institute organization of the State college of agriculture and the State department of public instruction were jointly supervising the club work, which had spread into nearly every county. In New York the farmers'-institute bureau, in cooperation with the State department of education, held about 275 boys' and girls' institutes in towns where the regular farmers' institutes were held. In South Dakota one five-day institute devoted entirely to boys and girls was held, with an examination on the fifth day, for which prizes contributed by local people were awarded. The boys were instructed in stock and grain judging and the girls in baking, needlework, and personal and home hygiene.

For several years the farmers'-institute organizations in the State departments of agriculture did not usually emphasize special work for young people, and the agricultural colleges were increasingly inclined to develop such work chiefly as a distinct part of the extension work previous to the passage of the Smith-Lever Act. Club work became more closely united with the extension organizations, or, in the Southern States, with the farmers' cooperative demonstration work. Although some work of interest to young people continued to be done at farmers' institutes in a considerable number of States, only five States reported institutes for young people in 1914.

Farmers'-institute organizations were often interested in the improvement of rural schools, and different phases of this subject were presented and discussed at many institutes. Institute lecturers often visited the schools in the vicinity of the institute and spoke to the pupils. Reports on their contacts with the schools were often made at the State or national meetings of institute workers. A few examples will serve to show the character of these relations:

In 1906 in Michigan several secretaries of county farmers' institutes made arrangements with the county superintendent of schools to furnish a speaker for a series of farmers' institutes. During the forenoon the superintendent and this speaker visited the schools near the place where the institute was held. Addresses were made to the pupils, and they, together with their teachers, were invited to attend the institute in the afternoon and evening, where they heard addresses on agricultural subjects and on topics relating to rural schools and country life. In California a farmers'-institute section was created in the State teachers' annual convention. In Arizona in 1909 the institute force lectured at the local schools to the children and others and for a time gave instruction in agricultural subjects to regular classes. The Mississippi Farmers' Institute aided county high schools by giving in them short courses in agriculture.

In Georgia the farmers'-institute force held teachers' institutes in cooperation with county school commissioners. In 1910 institute directors in two States reported that their lecturers addressed 50,000 children at the schools, and similar work was done in several other States.

In 1912, 12 States reported that 55 farmers'-institute lecturers gave 371 days to teachers' institutes, 405 gave 612 days to addresses at

high schools, 8 gave 21 days to normal schools, and 42 gave 2,953 days to the rural elementary schools.

Besides agricultural and home-economics subjects discussed at farmers' institutes, the programs often included such matters as improvement of rural schools, good roads and how to make them, how to keep young people on the farm, recreation in the rural community, and the importance of good books and papers in the farm home. Music, readings, lantern-slide lectures on subjects of general interest, and other entertaining features generally formed a part of the evening sessions. Thus farmers' institutes have been of much educational value in a general way to great numbers of farming people.

The breadth of the farmers'-institute movement, as well as some of its important results, is shown in the following summary of a statement compiled from the replies of State institute directors and published in Office of Experiment Stations Report for 1912 (*52*):

Among the results of institute work directly affecting agricultural practice are better selection of seeds; proper use of fertilizers for various crops; use of lime and phosphate rock; better methods of cultivation; soil and moisture conservation; use of alfalfa, cowpeas, soy beans, scarlet clover, and other forage plants; growing of potatoes and crops suitable for canning; diversification and rotation of crops; control of fungous diseases and insect pests by spraying; renewal of old and neglected orchards; building of silos; growing of well-bred animals; weeding out of unprofitable dairy cows; use of the balanced ration; better sanitary arrangements in stables; prevention of tuberculosis; establishment of cheese factories; poultry husbandry; better shoeing of horses; use of concrete in farm buildings; and change from grain farming to dairy farming. Results of more general character were also reported, such as the arousing of farmers to the possibilities of intelligent effort in improving their farms; the bringing of young people to respect agriculture as a profession; the reaching of illiterate farmers; the stimulation of interest in scientific farming; the organization of farmers' clubs, cooperative associations, cow testing and breeding associations; the improvement of roads, farm homes, schools, and school buildings; and the development of a large number of capable agricultural lecturers and teachers. The farmers' institutes demonstrated the great importance and value of carrying information to the farming people through the personal activities of intelligent agents. They thus helped to lay the foundations for a still broader and more effective system of popular education outside the schools and colleges, later developed by the farmers' cooperative demonstration work and the extension work of the agricultural colleges.

THE DECLINE OF FARMERS' INSTITUTES, 1916 TO 1923

The passage of the Smith-Lever Extension Act of May 8, 1914, and its acceptance by all the States radically changed the status of farmers' institutes. The Federal authorities charged with the administration of that act discouraged the use of Smith-Lever funds for the ordinary type of farmers' institutes. The agricultural colleges receiving the benefits of that act withdrew from the institutes features which had definite educational value, such as field demonstrations, movable schools, women's institutes, and boys' and girls' clubs. State legislatures, having undertaken to support the Smith-Lever work, were not inclined to continue substantial financial support to the institutes. State departments of agriculture, seeing that the agricultural colleges were in a position to greatly strengthen their educational work, were convinced that they would do well to lay greater emphasis on their regulatory and statistical functions. This position was strengthened by the passage of the Smith-Hughes

Vocational Education Act in 1917, which made large provision for the education of farming people in the secondary schools. The State departments through their association, therefore, made an agreement with the agricultural college association and the United States Department of Agriculture to keep out of educational work, and favored a gradual withdrawal from the management of farmers' institutes. The transfer of this management to the agricultural colleges has gone on until in 1924 there were only six States—Illinois, Iowa, Maine, Missouri, New Hampshire, and Rhode Island, in which institutes were conducted by State departments of agriculture, and the State appropriations for institutes declined from approximately $158,000 in 1920 to less than half that amount in 1924, and the number of institutes from 2,991 to 1,313. Since 1915 the term "farmers' institute" has been used almost exclusively for short meetings in which lectures or papers on agricultural subjects have been presented and in which the discussion has been largely by the farming people in the audience.

Whereas in 1914 about 9,000 institutes of all kinds were held in 44 States, with an attendance of over 3,600,000, by 1918 the number had decreased to about 7,000 in 31 States, with an attendance of less than 2,000,000. There was a great renewal of activity in holding one-day institutes in 1920, when their number in 33 States was about 10,000, with an attendance of over 2,300,000. The next year the number dropped to 4,676 in 28 States, with an attendance of 1,262,839. After that interest in the institutes grew considerably in some States. In 1924 over 3,500 were held in 21 States, with an attendance of about 1,475,000. In a few States only was there a large attendance. Ohio led, with 639 institutes and an attendance of 524,400; Indiana had 463 institutes, with an attendance of 160,872; Wisconsin had 325 institutes, with an attendance of 130,833; Iowa had 123 institutes with an attendance of 148,096; North Dakota had 124 institutes with an attendance of 37,144. Those who favor the continuance of farmers' institutes in simpler form claim that in a peculiar sense they are meetings in which the farmers have a free forum for the discussion of problems deemed by them locally important. Apparently, however, in most States the farmers feel that ample opportunity for the discussion of their problems is afforded in the various meetings held by the extension forces, the farm bureaus, and other farm organizations.

EXTENSION WORK OF THE AGRICULTURAL COLLEGES PRIOR TO 1914

Along with their participation in farmers' institutes, the agricultural colleges independently undertook various forms of extension work. In many cases these were also taken up by the farmers'-institute organizations, particularly in States where the institutes were controlled by the colleges.

In undertaking extension work in a systematic way the agricultural colleges were influenced by two movements for supplementary education of adults, which were actively promoted during the latter part of the nineteenth century.

The most popular and widespread of these movements was the Chautauqua system. This movement began with the foundation in

1874 of the Chautauqua Sunday School Assembly, by Lewis Miller and John H. Vincent. This assembly met for 10 days in August, at Chautauqua Lake in New York. Its program combined instruction, recreation, and entertainment. The variety of subjects studied increased from year to year, and the session was lengthened. In 1878 the Chautauqua Literary and Scientific Circle was organized and had a council in whose membership were Lyman Abbott and Edward Everett Hale. Home readings extending over four years were organized and planned. Each year's course consisted of 4 books and 12 numbers of a special magazine. In 1883 correspondence courses were begun and continued for several years. Within a few years 60,000 persons were pursuing these courses systematically, and there were many other people following the Chautauqua readings to a considerable extent, either individually or through small local circles. Interest in the movement was kept up by the well-attended annual assemblies at Chautauqua Lake and by similar meetings organized independently in various parts of the country.

Meanwhile the American universities and colleges had been influenced by the system of "university extension" started in England in 1866 and taken up by Cambridge and Oxford universities and by other educational institutions in England and other countries. In the United States this system was introduced through city libraries, especially in Buffalo, Chicago, and St. Louis. By 1890 it had received sufficient attention to warrant the organization of the American Society for the Extension of University Teaching. The following year an appropriation of $10,000 was made by the State of New York for the organization and supervision of university extension work, but none of this money was to be spent for lecturers. In 1892 the University of Chicago included provision for university extension in its original plan of organization and began the employment of a staff for this purpose. That year the University of Wisconsin also began organized extension work and in 1906 established a department of university extension which developed this work on a broad scale. "Between 1906 and 1913, inclusive, 28 institutions organized university extension, and between these dates 21 institutions reorganized the work," usually by establishing definite extension departments.

That the agricultural colleges were influenced by the university extension movement is shown in some of the programs of their association. (1) In 1894 one of the subjects in the section on agriculture and chemistry was, "The attitude of the agricultural colleges toward university extension." Under this head Professor Voorhees outlined the agricultural extension work begun by Rutgers College in 1891. This included courses of six lectures each on soils and crops, feeding plants, and animal nutrition. Persons might select one or more of these courses. An hour was given to each lecture, which was illustrated by specimens and other material. A second hour was used for a quiz and for questions by the students. If one lecture a week on each subject was given, students doing the systematic work of the whole course might do agricultural reading, write an essay, and at the end of six weeks take an examination.

At the meeting of the Association of American Agricultural Colleges and Experiment Stations in 1897, I. P. Roberts, in the section

on college work, read a paper on "How may university extension work be conducted by the college of agriculture?" In this paper he described the agricultural extension work being done in New York. In discussing this paper B. C. Buffum spoke of a university extension course given by the University of Wyoming, which was like Chautauqua work and included correspondence courses and lectures in towns. In 1900, J. Craig spoke on "University extension in agriculture at Cornell University."

On July 13, 1897, the University of California created a department of university extension in agriculture, with Professor Wickson as superintendent and two assistants who were conductors of farmers' institutes.

The Pennsylvania State College in 1892 organized the Chautauqua course of home reading in agriculture. The college provided the books and gave the readers examinations when they desired. After a time it was found desirable to aid the readers through correspondence, and in 1897 printed lessons on particular subjects treated in the books were sent out. The course was then known as "home study." In 1898 the name of the enterprise was changed to "correspondence courses in agriculture." On March 1, 1899, the total enrollment of students was 3,416, including those in the Chautauqua course, but 460 had received instruction by correspondence. To these over 1,800 lessons had been sent, and more than 1,100 examination papers had been graded. There were students in most of the States and in some foreign countries. Their ages ranged from 15 to 75 years and averaged about 33 years. This plan entailed so much work by the college officers that it was found impracticable to use in instructing many students.

An early and important development of organized extension work in agriculture in the State of New York resulted from a request by farmers in Chautauqua County, largely devoted to grape growing, for experiments suited to their needs from the experiment station at Cornell University. The station had no funds for this work, and the farmers therefore appealed to the legislature in 1894.

About this time, L. H. Bailey, then professor of horticulture at Cornell University, suggested that State aid should be sought for publishing information and holding horticultural meetings. S. F. Nixon, assemblyman from Chautauqua County, obtained the passage of an act which granted $8,000 to be spent by the experiment station in 16 counties in western New York for horticultural experiments, investigations, instruction, and information. This fund was increased to $16,000 in 1895. Professor Bailey was put in charge of the work. Tests or demonstrations, such as orchard spraying, were conducted on a considerable number of farms, together with one-day or two-day meetings, sometimes accompanied by demonstrations, horticultural schools of two to four days, and the publication of popular bulletins (*60*).

In 1896 extension work was expanded (*62*) to include (1) itinerant or local experiments as a means of teaching, (2) readable expository bulletins, (3) itinerant horticultural schools, (4) elementary instruction in nature study in rural schools, and (5) instruction by correspondence and reading courses. This plan was so successful that the legislature in 1897 broadened the scope of the work to include the

whole State and agriculture in general. The appropriation was increased to $25,000 to be spent under the supervision of the director of the New York College of Agriculture, as follows:

In giving instruction by means of schools, lectures, and other university extension methods, or otherwise, and in conducting investigations and experiments; in discovering the diseases of plants and remedies therefor; in ascertaining the best methods of fertilization of fields, gardens and plantations; and best modes of tillage and farm management and improvement of livestock; and in printing leaflets and disseminating agricultural knowledge by means of lectures or otherwise; and in preparing and printing for free distribution the results of such investigations and experiments, and for republishing such bulletins as may be useful in the furtherance of the work; and such other information as may be deemed desirable and profitable in promoting the agricultural interests of the State (*74*).

That year besides the horticultural investigations, 200 local experiments with various crops were conducted; 10,000 teachers were reached through visits to schools, lectures at teachers' institutes, and distribution of nature-study leaflets; 15,000 pupils were enrolled for nature study; and 1,600 young farmers took correspondence courses.

Afterwards junior naturalists' clubs were formed, and a nature-study monthly was issued. Separate reading courses for farmers and their wives were organized. A winter's course at the college was also included in the extension program. An extension division was created in the college, and there was much personal work by college officers at meetings throughout the State.

In 1902, 29,792 persons were enrolled in the farmers' reading course, 9,500 in the farmers' wives' reading course, 1,800 in a home nature-study course for teachers, 20,000 in the junior naturalists' course, and 26,000 in the junior gardeners' course.

This extension work in New York attracted much attention throughout the country, and the Cornell publications, which were on many subjects and attractively presented, were widely distributed and discussed.

Professor Bailey compares the Pennsylvania and the New York reading courses as follows:

The older or Chautauqua-Pennsylvania idea is that of a definite, prescribed, self-limited, technical correspondence curriculum, the completion of which is signalized by a certificate or diploma. The other, or Cornell idea, is that of a flexible, nonlimited, untechnical reading course in which there is no system of counts, and which does not lead to certificatory honors. The former is intensive; it is adapted to the few. The latter is elementary; it is adapted to the many. Each is incomplete (*61*).

As the extension work of the agricultural colleges in some States increased in scope, a special officer at the college to care for its general interests became necessary.

In 1901 when Dean Davenport was endeavoring to establish a real college of agriculture in the University of Illinois and to induce farm boys to attend this college, he obtained the appointment of Fred H. Rankin to aid him in this matter. The recommendation of President Draper, approved by the trustees September 28, 1901, was that he should be appointed "representative of the college of agriculture in connection with the farmers' institute" to conduct correspondence "touching the interest of scholarship in connection with the farm work of the State in the fullest measure possible" (*66*). The peculiar

attitude of the university administration toward its agricultural work is shown by the fact that Mr. Rankin's salary of $1,500 was to be paid half from college funds and half from the State station funds. He began work October 1, 1901, and the scope of this enterprise was soon broadened so that on June 9, 1902, his title was changed to superintendent of agricultural college extension.

In an address before the Kansas Board of Agriculture January 14, 1904, he described the work he was doing and some of its results. "The work of this department has in view the bringing of the educational forces of the college in touch with the largest number of young persons possible living on Illinois farms, and inducing as many of them as possible to avail themselves of the advantages of higher education in agriculture and other subjects" (*72*). The work included (1) correspondence, (2) visiting farmers' institutes and farm homes, and (3) young people's experimental clubs and excursions to the university. Efforts were being made to enlist the interest and cooperation of leading men in a county, in particular the superintendent of schools, and encourage them to organize clubs of boys and girls. Helpful literature for the clubs was being distributed by the college, and farmers' institutes were offering prizes for the best corn raised by club members. Besides the corn project there were simple "experiments" in root pruning, counting the number of barren stalks on a given area, observation of time of pollination, and further nature study. The girls had some home work, and for them there was a special leaflet on pure air and house ventilation. Interest in the work was proved by the attendance of 75 more students at the college of agriculture that year, by the better preparation of these students, and by the wider and more intelligent understanding of the college aims among the farming people of Illinois.

In Ohio the board of trustees of the State university employed as superintendent of extension work in May, 1905, A. B. Graham, whose work with boys' and girls' agricultural clubs has been mentioned (p. 39). From the sales fund of the university farm approximately $2,500 was devoted to extension work the first year, with increasing amounts for several years. Mr. Graham began work July 1, 1905, and in October of that year issued the first number of the Agricultural College Extension Bulletin. This was principally concerned with extension work for young people and contained articles on nature study, agriculture, and social life in rural communities. Members of the agricultural faculty assisted in the preparation of material for this series of bulletins. For the first four years much attention was given to the boys' and girls' clubs. In 1906 there were about 3,000 children enrolled in these clubs in Ohio. Addresses on elementary agriculture at farmers' and teachers' institutes and in summer schools formed a considerable part of the early work.

In Iowa, after much interest had been awakened in the agricultural extension work of the State college, and particularly in the propaganda for improved corn by P. G. Holden, professor of agronomy, the legislature passed an act, approved April 10, 1906, under which $15,000 was appropriated for agricultural extension and experimental work by the agricultural college (*67*). This act contained two sections for extension and experimental work, respectively, away from

the seat of the college, but a clear distinction between these two lines of work was not made. The act authorized the college—

> To undertake and maintain a system of agricultural extension work. Under this system the said college shall be authorized to conduct experiments in the various portions of the State, and in giving instruction wherever, in the judgment of the college authorities, it shall be advisable, in reference to the various lines of agricultural work maintained upon the college grounds at Ames, Iowa.

This work was to include corn and stock judging at agricultural fairs, institutes, and clubs; short courses of instruction at suitable places throughout the State; and lectures and demonstrations in agriculture and domestic science.

Professor Holden was made superintendent of extension, with assistants in animal husbandry, farm crops, horticulture, soils, dairying, and domestic science. He was to have charge of the farmers' institutes as well as the other forms of extension work. The assistant in animal husbandry was R. K. Bliss, now extension director. The work grew rapidly, and in 1907 the appropriation was increased to $27,000. Experiments were also permitted under this second act, but the college trustees decided against experimental work in the extension department, and it was otherwise provided for. The extension department was to give instruction and demonstrations by lectures at farmers' institutes, clubs, and farmers' picnics, fairs, and short courses. It was organized on the same plan as other college departments; its head had the same relation to the dean as the heads of other departments; and instructors and lecturers were appointed in the same way as in other departments. It was expected that local expenses, and also traveling expenses, would be paid, as far as possible, by the communities and organizations served. Boys' and girls' clubs were organized in connection with the schools and their work was promoted by a special series of circulars.

In Indiana in 1905 the agricultural experiment station of Purdue University received a permanent increase of State appropriation on such terms that it was enabled to enlarge its extension work. George I. Christie, as associate in agricultural extension, reported in 1906 that this work included "lectures before farmers' institutes, corn and agricultural clubs, the use of special trains, newspaper articles, special bulletins, exhibits at county and State fairs, farmers' excursions [to the university], and demonstration work on county farms" (*63*). The next year the work was enlarged, and Mr. Christie became superintendent of agricultural extension. December 16 to 21, 1907, the first district short course was held at Rushville. Such courses soon became popular and were attended by hundreds of farmers. The report for 1910 states that the attendance at the course at Evansville was 2,137. The club work also grew rapidly. In 1907–1908 there were about 5,000 plats of corn, grown by boys in 35 counties. Interested persons contributed prizes of cash, merchandise, and trips to Purdue University. The short course there in January, 1908, was attended by 67 boys. The following year boys' and girls' clubs were organized in 47 counties, and 91 young people attended the short course. Special work in bread making, fruit canning, sewing, and other domestic skills was provided for the girls.

The Maish Act of 1909 gave the station $10,000 annually for extension work, and when this proved insufficient to meet the demand the legislature in 1911 passed the Clore bill, which provided $10,000

the first year and $30,000 annually thereafter for extension work and authorized the payment of local expenses, including "prizes for contests," from county funds up to "twenty-five cents for each square mile of territory in the county." Under this act the university created a department of agricultural extension, "coordinate with the departments of instruction and the experiment station." This department was put in charge of a superintendent "under the general direction of the president of the university." Mr. Christie was appointed to this office. Extension work in home economics had previously been conducted by the station and was much enlarged under the new organization.

The broadening of the extension work of the agricultural colleges and its rapid development in a number of States as a distinctive feature of the educational work of these colleges created a desire for its more systematic organization. This was expressed at the meeting of the Association of American Agricultural Colleges and Experiment Stations in 1904 by President Butterfield, of the Rhode Island State College, who had been superintendent of farmers' institutes in Michigan from 1895 to 1900 and had recommended the creation of an extension department in the Michigan Agricultural College in 1898. In a paper on "The social phase of agricultural education," he said:

> To carry out the function of the agricultural college we need, finally, a vast enlargement of extension work among farmers. This work will not only be dignified by a standing in the college coordinate with research and the teaching of students, but it will rank as a distinct department, with a faculty of men whose chief business is to teach the people who can not come to the college. This department should manage farmers' institutes, carry on cooperative experiments, give demonstrations in new methods, conduct courses of reading, offer series of extension lectures, assist the schools in developing agricultural instruction, direct the work of rural young people's clubs, edit and distribute such compilations of practical information as now appear under the guise of experiment-station bulletins, and eventually relieve the station of the bulk of its correspondence. Such a department will be prepared to incorporate into its work the economic, governmental, and social problems of agriculture. It will give the farmers light upon taxation as well as upon tree pruning. The rural school will have as much attention as corn breeding. The subject of the market—the "distributive half of farming," as John M. Stahl calls it—will be given as much discussion as the subjects bearing upon production. We shall find here a most fertile field for work. The farmers are ready for this step (*1*).

At the same meeting he proposed that an effort be made to obtain the franking privilege for extension publications.

At this meeting the executive committee was instructed to make a report on standing committees, and when this was done in 1905 a committee on extension work was recommended, along with those on teaching and experimentation. The association approved this recommendation, and this new committee was appointed, consisting of President Butterfield, of Rhode Island; President Van Hise, of Wisconsin; Director Kilgore, of North Carolina; Director Curtiss, of Iowa; President Soule, of Virginia; and Assistant Secretary of Agriculture W. M. Hays. The committee chose Professor Hamilton, of the Office of Experiment Stations, as its secretary. It was understood that this committee would deal with "farmers' institutes, correspondence courses, clubs of boys and girls, and other matters ordinarily included in such work."

With the aid of the Office of Experiment Stations, especially as represented by Professor Hamilton, the committee collected a large amount of information regarding work done by more than 300 agencies which might be broadly considered as agricultural extension work. These agencies included colleges, experiment stations, normal schools, industrial high schools, State and county departments of education, State and county agricultural organizations, libraries, granges, and the agricultural press. The work done by colleges fell into four groups, (1) farmers' institutes, (2) itinerant lectures other than those at farmers' institutes (traveling schools, railroad specials, extension courses, miscellaneous lectures), (3) literature (correspondence, publications, articles for the press, correspondence and reading courses, traveling libraries), and (4) object lessons or outdoor practicums (field demonstrations, cooperative demonstrations and tests, educational exhibits at fairs, corn and stock judging, excursions to colleges and experiment stations, work of boys' and girls' clubs).

The committee also formulated the following tentative definition:

> Extension teaching in agriculture embraces those forms of instruction, having to do with improved methods of agricultural production and with the general welfare of the rural population, that are offered to people not enrolled as resident pupils in educational institutions (*1*).

It recommended

> that each college represented in this association organize as soon as practicable a department of extension teaching in agriculture, coordinate with other departments or divisions of the agricultural work, with a competent director in charge and, if possible, with a corps of men at his disposal. This department should take on, just as far as possible, all phases of extension teaching now performed in other ways. * * * If, in case of any agricultural college, this step is at present impracticable, we would recommend most strongly that the college appoint a faculty committee on extension teaching in agriculture.

President Butterfield also obtained the adoption of a resolution favoring an adequate appropriation for the Office of Experiment Stations to enable it to investigate agricultural extension teaching more thoroughly, to assist the colleges to organize this work somewhat comprehensively, and to disseminate information on new developments in this form of agricultural education. Beginning with 1907 that office made an annual report on extension work as distinct from farmers' institutes.

The committee's report in 1907 gave a summary of the agricultural extension work being done by 42 colleges in 39 States. About one-third of these institutions were doing some extension work not included in the enterprises connected with the farmers' institutes. In Indiana, Purdue University was working along a considerable number of lines, as follows:

> Lecturing at farmers' institutes; holding normal-institute schools for institute lectures; providing short courses in agriculture; equipping and accompanying railway specials; assisting at teachers' institutes; providing courses in corn and stock judging in district centers; holding summer schools for teachers; sending out field specialists to give advice to farmers; providing courses of study for agricultural high schools; preparing and sending out bulletins, reports, and circulars; preparing articles for the public press; conducting and publishing an agricultural journal; conducting cooperative experiments in agriculture; providing educational exhibits at fairs; organizing excursions to the college by agricultural associations and individual farmers; conducting experiments and

demonstration tests on county poor farms, and organizing farmers' clubs, women's clubs, and boys' and girls' clubs (*1*).

At the Iowa State College a department of agricultural extension work had the same rank as the other agricultural departments in the college.

Short courses were conducted in different parts of the State in which the extension department furnished the teaching force, and the local people took care of all other expenses. Experiment and demonstration work have been carried on in different parts of the State, particularly on the county poor farms. During the summer months a picnic is held at each of these county farms, to which people are invited to see the experiments that are being conducted and to listen to lectures explanatory of this character of work. There has been also cooperation with the county superintendents and the teachers of the State in the introduction of the teaching of agriculture into the public schools. Assistance has been rendered to farmers' institutes, corn clubs, fair associations, etc. Members of the force have accompanied corn specials and dairy special trains, lecturing upon these topics and distributing literature (*1*).

In the college of agriculture of Cornell University, agricultural extension work was being conducted in the following lines:

(1) Special course instruction, (2) winter courses, (3) extension work by students, (4) reading courses, (5) school work, (6) experiments and demonstrations on farms, (7) tests and inspections, (8) surveys, (9) inquiries into economic and social questions, (10) cooperation with organizations, (11) organization of extension interests, (12) lectures and itinerant schools, (13) correspondence, and (14) publication.

* * * * * * *

Special course instruction not of full college grade and the short winter courses in general agriculture, dairying, poultry, horticulture, and home economics are regarded as being branches of extension teaching. Work by students in organizing societies and reading clubs in various parts of the State is classed as a separate form of extension work. Reading courses for farmers and for farmers' wives and school work, particularly as it relates to nature study along lines of school gardens, the organization of junior naturalist clubs, and the enrollment of school teachers for correspondence on nature-study subjects are conducted from the university as a center. Experiments and demonstrations on farms are utilized for instructing the cooperator in methods (a) to fit him for working out his own problems, (b) to demonstrate or determine the value or efficiency of new theories and discoveries, and (c) to discover new truth which may be worthy of record in publications by the college of agriculture. Work of this demonstration and experimentation character is under way in 45 counties and upon 1,150 plats, and about 400 persons are engaged in it, embracing the subjects of agronomy, horticulture, entomology, and poultry rearing.

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Last summer an officer of the department traveled throughout the State, visiting persons engaged in dairy work, showing where improvements might be made, and when necessary remaining in a locality long enough to see that his suggestions are put into operation. Breeders of cattle and other agricultural associations are frequently assisted through having the traveling expert test the milk of cows in order to determine whether the animal is entitled to be recorded.

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Under "cooperation with organizations" the college of agriculture is taking up the study of the various associations which contribute to the general welfare of country people in an educational way. It has been doing work of this character in connection with the State grange, which now provides six scholarships in the college of agriculture. It is endeavoring also to assist the fair associations to become educational. Rural churches, village improvement societies, women's clubs, experiment clubs, and all other organized bodies of agricultural people are included in this field of extension work. The college also, under the division of organization of extension interests, is endeavoring to

effect a league of agricultural people into an organization that will promote their interests.

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Another important feature of extension work is that of the traveling lecture work, in which trained men are sent out to deliver addresses and attend institutes and conventions. Much of the matter of conducting correspondence has also been placed in the extension division. This is regarded as a most important department and is systematized so as to provide for prompt attention to all correspondence of whatever kind. Last of all, there is the division of publications. At present there are the Junior Industrialist Monthly; 4 quarterly issues of the Home Nature Study Course, with 17 supplements, published during the past year; bulletins of the farmers' reading course issued between November and March; bulletins of the farmers' wives reading course, and such bulletins of the experiment station as record data relating to demonstrations and tests (*1*).

The college of agriculture of Ohio State University carried on agricultural extension work under a superintendent, had a large number of boys and girls enrolled in clubs connected with the rural schools, and used extension bulletins to promote the teaching of agriculture in elementary and high schools.

At the Pennsylvania State College the correspondence course continued to be a prominent feature of agricultural extension work. A superintendent of extension work had recently been elected. An expert, representing the dairy department, had been employed to travel throughout the State and give instruction to dairymen. In December, 1906, a school of agriculture, attended by 187 farmers from 38 counties, was held at the college for seven days.

The Rhode Island College of Agriculture and Mechanic Arts had classified its extension work as follows:

(1) Demonstrations, (2) cooperative experiments, (3) extension lectures, (4) special lectures, (5) a carpet-bag campaign, (6) correspondence courses, (7) popular bulletins, (8) traveling libraries, (9) the assistance of the grange, (10) nature study, (11) school gardens, (12) correspondence, (13) general office work, and (14) miscellaneous work.

* * * * * * *

The carpet-bag campaign is an innovation in extension teaching. The plan is to send some one who, by training and experience, is able to appreciate the problems which the average farmer has to meet, and have him go from house to house and engage farmers in conversation and hold neighborhood meetings for the mutual discussion of agricultural problems (1).

The University of Illinois had had a superintendent of extension work for several years. In 1907 a special officer was employed to aid in introducing agriculture in public schools.

At the North Carolina College of Agriculture and Mechanic Arts a faculty committee on agricultural extension work was organized and was making a special effort to extend agricultural teaching in the schools.

At the University of West Virginia a committee on agricultural extension work had been appointed and had recommended the creation of an extension department with a director.

The Tuskegee Normal and Industrial Institute in Alabama was about to make use of the "Jesup wagon," which was "in effect a traveling school of agriculture equipped with illustrative material and lecturers, to go out to the plantations, farms, and other points wherever a few people can be gotten together to hold meetings for the discussion of subjects along all lines of farm activity" (*1*).

In 1908 the committee on extension work of the Association of American Agricultural Colleges and Experiment Stations renewed its recommendation that the land-grant colleges make a definite organization for their agricultural extension work and that their association recognize the importance of such work by creating a "section of extension work." This led to considerable discussion, and the opponents of a new section strongly urged that matters relating to extension work should be included in the program of the college section. On the other hand, it was pointed out that unless the college association more definitely recognized the extension work, it would very likely become a chief part of the work of the farmers' institute association. Director Curtiss, of Iowa, representing the extension committee, proposed an amendment to the constitution of the college association, providing for an extension section, which under its rules went over to the meeting in 1909. That year the committee on extension work strongly advocated the creation of this section because it would accomplish the following results:

(1) It would at once elevate the extension work of the land-grant colleges to the place where it belongs—a line of endeavor coordinate with that of research through the experiment station and that of teaching through the college courses.

(2) It would immediately suggest to all the land-grant colleges the supreme desirability of organizing extension work in a way commensurate with its dignity and with the need for the work.

(3) It would bring into the ranks of this association the active managers of extension work, who have already formed an organization of their own. We need these men for the good of the colleges, for extension work can not safely be separated from the other work of our institutions (*1*).

The amendment to the constitution was adopted by a vote of 42 to 9. It created "a section on extension work composed of directors or superintendents of extension departments in the institutions in this association, or the representatives of such departments duly and specifically accredited to this section." The section was organized by the election of A. M. Soule, of Georgia, as chairman, and G. I. Christie, of Indiana, as secretary.

The committee emphasized and elaborated its previous recommendation regarding the organization of agricultural extension work within the college, as follows:

(1) That every land-grant college appoint a director of extension work who shall give all his time to this line of endeavor.

(2) That sufficient salary be paid to secure a man who is well equipped for the place, and that he be given substantial funds at the outset.

(3) That, whenever possible, he be given assistants, either one or more men who can give all of their time to extension work and act as "field agents," or have at his disposal the partial time of men who are connected with the college or station staff.

(4) That the first work to be done should be that of organizing those methods of extension work which are already in vogue at the college. Nearly all the colleges have large correspondence with farmers, send out publications which are in the nature of monographs on practical subjects, give lectures before granges and other local organizations, and hold demonstrations. We would advise that all of this work be unified and put, so far as the administration is concerned, into the hands of the director of extension work. It may be desirable temporarily to have even the short winter and summer courses offered by the institution placed under the same management although strictly speaking, these enterprises are not extension work. It is exceedingly important that men assigned chiefly to extension teaching, while immediately responsible to the director of that work, shall also have equally close connections with those teaching departments of the institution in which their special subject naturally lies.

(5) We would then go so far as to suggest that those activities of the experiment station which are not primarily connected with research or experimentation, but which are really designed to give popular dissemination to general agricultural information, and which so burden the time and energy of most of our station workers, should as rapidly as possible be given over to the general direction of the director of extension work.

(6) Finally, and most important of all, we would urge upon the director of extension work and the administration of the institution the prime necessity of getting into the public mind a thorough understanding of what extension work is. It is not a scheme to advertise the college. It is not a plan to trap students for the college, or even to get boys and girls interested in agricultural schools and colleges generally. It is fundamentally a means of teaching the people out of school about agriculture and country life in all its phases. It is an educational proposition. Its aim should be to reach every farmer and his family (*1*).

Attention was called to that portion of the report of the commission on country life, which dealt with extension work, as follows:

We find a general demand for Federal encouragement in educational propaganda to be in some way cooperative with the States. The people realize that the incubus of ignorance and inertia is so heavy and so widespread as to constitute a national danger, and that it should be removed as rapidly as possible. It will be increasingly necessary for the National and the State Governments to cooperate to bring about the results that are needed in agricultural and other industrial education.

The consideration of the educational problem raises the greatest single question that has come before the commission, and which the commission has to place before the American people. Education has now come to have vastly more significance than the mere establishing and maintaining of schools. The education motive has been taken into all kinds of work with the people, directly in their homes and on their farms, and it reaches mature persons as well as youths.

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The arousing of the people must be accomplished in terms of their daily lives or of their welfare. For the country people this means that it must be largely in terms of agriculture. Some of the colleges of agriculture are now doing this kind of work effectively, although on a pitiably small scale as compared with the needs. This is extension work, by which is meant all kinds of educational effort directly with the people, both old and young, at their homes and on their farms; it comprises all educational work that is conducted away from the institution and for those who can not go to schools and colleges. The best extension work now proceeding in this country—if measured by the effort to reach the people in their homes and on their own grounds—is that coming from some of the colleges of agriculture and the United States Department of Agriculture.

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To accomplish these ends we suggest the establishment of a nation-wide extension work. The first, or original, work of the agricultural branches of the land-grant colleges was academic in the old sense; later there was added the great field of experiment and research; there now should be added the third coordinate branch, comprising extension work, without which no college of agriculture can adequately serve its State. It is to the extension department of these colleges, if properly conducted, that we must look for the most effective rousing of the people of the land (*1*).

Interest in the development of organized extension work through the agricultural colleges grew rapidly. In 1910 the committee on extension work reported that extension departments had been organized in 35 institutions in 32 States and partially organized in 3 other States. One hundred and thirteen persons were employed full time in extension work in 34 States and Territories, and 189 persons were giving part time to this work in 16 States. A number of States were making considerable appropriations, and there was also an increasing amount of money from local sources. Funds,

derived from State appropriations and other sources, amounting to about $400,000 were used that year for college extension work, as distinguished from farmers' institutes. At the session of the graduate school of agriculture held at the Iowa State College in July, 1910, several meetings of extension workers and others from a considerable number of States were held under the direction of P. G. Holden, superintendent of agricultural extension work at that college. At these meetings the equipment and methods of extension work at that college were fully displayed and discussed. The many charts and much apparatus and illustrative material assembled by the Iowa State College for this work were a revelation to many.

These meetings brought together by far the largest and most important assemblage of persons directly connected with the extension work of our agricultural colleges. The vital relation of the proper development of this branch of agricultural education to the general success of the college was clearly brought out (*1*).

A large part of the session of the Association of American Agricultural Colleges and Experiment Stations in 1910 was devoted to consideration of extension work. The new section on extension work held its first session. Papers were presented by Professor Hamilton on the status of extension work, with special reference to methods and appropriations, and by E. A. Burnett, of Nebraska, on extension schools of agriculture. At a joint session of this section and that on college work, the training of extension teachers was discussed by the writer, by W. H. French, of the Michigan Agricultural College, and by others. The extension committee also included a brief discussion of this subject in its report. In another section of their report the committee discussed the administrative organization of extension work. Three methods of organization were described: (1) The election of a director, to whom is assigned an adequate clerical force, but "whose office is merely a clearing house for the extension work performed by members of the various departments of the college and station. The objection to this plan is that it is a very loose organization and that under it it will be very difficult indeed to develop large operations in economic fashion." (2) "The organization of what is practically a separate institution," with a director and a staff of men and women whose whole time is given to extension work. This has the advantages of a unified organization but "tends to break down college unity, because it entirely breaks down departmental integrity." (3) The compromise plan, with a director of extension work responsible to the dean of agriculture or similar college officer, and a staff of full-time and part-time workers, who are members of the several college departments. This has the disadvantage of divided authority and responsibility but recognizes departmental integrity and particularly "the fundamental fact that extension work is merely one great method by which the institution as a whole expresses one of its main functions."

Between 1910 and 1914 the agricultural extension work of the land-grant colleges grew rapidly in extent and complexity. Its organization and administration presented many important problems which the colleges attempted to solve in various ways. The committee on extension work in 1913 summed up the results of its study as follows:

According to a classification made by this association at a previous meeting, we find the agricultural work of our State institutions divided into three fields—

college service, station service, and extension service. Various departments make up the organization of the station. These same departments make up the organization of the teaching work of the college and should make up in the same manner the organization of the extension service. The heads of departments in every institution should realize that to secure symmetrical growth they must all be interested in the development of all three lines of effort.

In looking over the administration of extension work in the various States we find that the methods of administration can be classified into two general types.

I. A separate extension organization largely independent of the college and the station and with no attempt at cooperation and coordination.

II. A cooperative extension organization similar to the station and the college organizations.

The establishment of a separate and extensive organization in the long run will be found to tend to build up a force of administrators, lecturers, and workers largely on an independent basis and often greater in number than the workers of the college and station. In this type the workers are listed in a separate division and have little if anything to do with the heads of departments who are specialists in their respective lines. Such an organization may develop good talkers and good workers from the extension standpoint—people who will put in long hours and who are loyal to the work. We believe, however, that in the end such a system will not result in the best service, because:

(a) There is no provision to insure consistency in scientific teaching of the agricultural institution as a whole. The attitude of the various departments of the institution toward fundamental problems of agriculture must be the same or confusion in the minds of the farmers will result.

(b) Unless brought in contact with new lines there is apt to be lack of development in extension workers. They do not come in contact with the specialists and at the end of a few years they may be talking nearly the same things they talked at the outset.

(c) They are not under the direction of a specialist who is up-to-date in the teaching and experimental fields.

(d) There is danger of overemphasizing the extension service, because the men do not come in close enough contact with the college service and station service.

(e) If the work should grow unduly, it would tend to create jealousies among those interested in other lines of agricultural service and would in the end fall short of doing the most good.

(f) Independent development has a tendency to lessen direct contact with the real source from which the actual inspiration of departmental work is derived.

It would seem from experience in the various States that extension administration should be centralized. Where this plan is in vogue the following lines of work are ordinarily handled by the administrative officials of the extension service:

(a) Planning of the general extension work.
(b) Setting dates for meetings.
(c) Making up extension programs.
(d) Billing extension speakers.
(e) Checking and vouchering extension money.

It is believed that such centralization will tend to bring about:

(a) Administrative economies.
(b) Lessened friction and misunderstanding.
(c) Avoidance of duplication of dates among the workers.
(d) Efficiency in matters of appropriations.

Under such a system it is our belief that no recommendation for appointment of extension men to handle special lines of work should be made by the extension director, except by agreement with the head of the department concerned. We further believe that the special extension man should be located in the department handling his line of work and should be under the direction of the head of the department. His salary and expenses should be paid from the extension fund where separate accounting of such funds is required.

The title given extension men varies in different institutions. It would seem to the committee that the same system of titles might well prevail for ex-

tension men that is in vogue in the regular departments of the institution concerned. The workers should be of coordinate rank, position, and title with college and station men (*1*).

A special committee appointed by the section on extension work, of which W. D. Hurd, of Massachusetts, was chairman, made an elaborate report at the meeting of the association in 1913. Its recommendations were as follows:

A. Organization.

1. We believe that wherever possible colleges of agriculture should organize themselves into four grand divisions: (a) Teaching of resident undergraduate students, (b) research, (c) graduate study, (d) extension; and that the position of director of the extension service should be made coordinate with that of the director of the experiment station.

2. We believe that the maintaining of a central organization for the direction of extension work, similar to that of an experiment station, will promote economy, harmony, and efficiency in the organization and direction of the work.

3. We would recommend the adoption throughout the colleges of titles for extension workers similar to those suggested in Section V of this report.

We believe that a uniform designation of extension work, such as "The Extension Service" throughout our colleges is desirable. We commend this particular term as being especially indicative of the type of work that is being done, for the reason that it conveys the idea of the college at work throughout the State.

4. In order to promote professional improvement and growth in extension workers, we would recommend that the colleges grant six months' leave of absence on pay in each three-year period of service, and that the grantees be required to spend this time in study or in research, or both.

5. We hold that only men of the highest qualifications should be engaged for extension work—college training, practical experience, temperament, a proper attitude toward the work, all being given due weight; that a uniform year of 11 months' service for extension men should be adopted; and that such men, on account of the extraordinary demands made upon them, should receive salaries at least equal to those which are paid to teachers and investigators, the proportionate amount of time while on service each year being duly considered.

6. We believe that coordination of college instruction, station work, and extension service is absolutely necessary; that in the arranging of work the closest cooperation should be practiced; and that only such methods should be used as will at all times preserve departmental integrity.

We believe departmental organization on the "tripod" plan to be most effective. We do not feel, however, that the plan suggested by some institutions of interchanging men, a half year at a time for teaching, research, and extension, would be likely to prove satisfactory.

7. Present economic conditions, and those likely to present themselves, will make a heavy demand on extension organizations in the near future. As pioneers in this movement, we should concentrate our efforts with a view of strengthening the organizations which we have started, so that they may form firm foundations upon which to build a superstructure which may withstand these heavy demands.

The adequate organization of extension work within our college and its proper correlation with other agencies is at the present time more important than is the starting of numerous new lines of work.

B. Training of students for extension work.

Realizing the difficulty of obtaining men for extension teaching, and that the demands will be greater in the future than in the past—a situation which will result, no doubt, in the employment of men who, while they may have technical training, may yet be entirely lacking in a knowledge of the extension field and its problems—we recommend that our colleges develop somewhere in their curricula special training courses and normal work, designed to familiarize promising juniors and seniors with extension problems, and to give them some kind of normal training for this work.

C. Cooperation with other agencies: Definition of the Work to be Carried on by the Several Organizations Working Within a State.

1. We believe that extension organizations in our colleges should cooperate with existing organizations, such as boards of agriculture and education, railroads, commercial organizations, and other State and national agencies in the furtherance of all good work looking toward the promotion of agriculture and the revitalizing of country life.

2. We believe that the United States Department of Agriculture working in the several States, the various commercial organizations, and interested individuals furnishing funds for the promotion of agriculture, should render this aid to, and perform their work under the direction of, the State college. Only by such a plan can concerted effort be secured and highest efficiency be maintained.

3. We would recommend that all extension teaching in agriculture (using the term as accepted by the Association of American Agricultural Colleges and Experiment Stations) should be centered at the college of agriculture; that the duties of boards of agriculture should be considered as generally administrative, such as the performance of control work, the offering of bounties and prizes for the encouragement of agriculture, the supervision of fairs, and other lines designed to advertise and develop the agricultural resources of the State; and that the work in the several States should be organized upon this plan (*1*).

In 1913 the funds for extension work aggregated $990,504, of which $663,310 came from State appropriations, $160,404 from local contributions, and $166,783 from other sources. State appropriations ranged from $1,000 in Montana to $72,250 in Missouri. Georgia, Indiana, Iowa, Kansas, Massachusetts, Minnesota, New York, Ohio, and Wisconsin gave from $40,000 to $57,500. Forty institutions had definitely organized extension departments. In 31 colleges 182 extension workers were employed whole time and 217 part time. Twenty-six institutions reported that lectures and demonstrations were given throughout the State by members of the faculty. Courses of lectures were arranged by 14 institutions, and this practice had been tried and abandoned by several. Seventeen institutions arranged courses which included concerts and other forms of entertainment as well as agricultural lectures. Ten institutions were operating demonstration farms. Demonstration plats on farms were much favored. In six States county agents were appointed by the extension director, and in seven States this work was carried on in cooperation with the United States Department of Agriculture. Nine colleges were conducting correspondence courses. Thirteen reported that short courses at the college were considered as extension work. Seventeen reported cooperation with railroads in running special agricultural trains, but there was a growing sentiment that such trains had "pretty much served their time." Eighteen reported movable schools as being decidedly successful. There was a considerable variety of work especially for farm women. Fourteen institutions had undertaken club work for boys and girls. Eighteen were issuing special extension publications.

Another special committee, of which K. L. Hatch, of Wisconsin, was chairman, reported on the preparation of extension workers. It was generally agreed that the qualifications of a competent extension worker include considerable farm experience, good ability as a public speaker, and a college education in agriculture or home economics. The college course for men should cover agriculture broadly and include English, the natural sciences, economics, sociology, psychology, principles of teaching, and public speaking. Women should substitute home economics for agriculture, though some instruction in dairying, poultry, and horticulture is desirable for them.

In 1903 Professor Knapp took this matter up with business men and farmers at Terrell, Tex. A committee of eight was formed, who provided $1,000 as an indemnity fund to protect against loss farmers who would attempt to grow cotton under his direction. Walter C. Porter volunteered to do this on his own farm and made a success of his demonstration, the object of which was to show what could be done with different varieties, fertilizers, methods of cultivation, and planting. About 70 acres of land were used, nearly equally divided between cotton and corn. Though there was much damage to the cotton by the bollworm, and to the corn by wind and hail, the crops gave Mr. Porter a profit of $700 more than he probably would have obtained if the methods commonly used in that region had been followed.

The opportunity to show on a broad scale that this was the correct procedure in aiding farmers, especially when they were financially embarrassed and discouraged, came immediately thereafter as the result of the invasion of the cotton boll weevil in Texas. This insect had crossed the Mexican border in 1892, and at the end of 10 years was making such widespread havoc in that State that southern farmers were thoroughly alarmed regarding the future of the cotton crop. In the fall of 1903 the Secretary of Agriculture and the Chief of the Bureau of Plant Industry visited the devastated region and became personally acquainted with the methods and results of the demonstration at Terrell. On their recommendation Congress promptly made an emergency appropriation of $250,000 to combat the boll weevil. Half of this sum was given to the Bureau of Entomology and half to the Bureau of Plant Industry. In the latter bureau $40,000 was assigned to Professor Knapp to determine what could be done by "bringing home to the farmer on his own farm information which would enable him to grow cotton despite the presence of the weevil."

Professor Knapp established headquarters at Houston, Tex., in January, 1904, and took counsel with farmers, bankers, merchants, railroad presidents, and other business men. Contributions of money, railroad trains, passes, and other aids were received. On February 19, 1904, W. D. Bentley was appointed as agent and served on an agricultural train of the Fort Worth & Denver Railroad for two weeks. Meetings were held in towns along the route, and lectures were delivered on cotton, corn, fruit, and forage and other crops. At first farmers were unwilling to agree to undertake demonstrations, but after Mr. Bentley joined the farmers' union he had better success and gave demonstrations in about 10 counties in the northwest part of the cotton section in Texas. W. F. Procter and James A. Evans were appointed February 12, 1904. The latter has remained in the Government service in prominent positions in connection with demonstration and extension work and at present is assistant chief of the Office of Cooperative Extension Work. Over 20 agents were employed in Texas in 1904, 3 in Louisiana, and 1 in Arkansas. That year over 1,000 meetings were held, and 7,000 farmers agreed to demonstrate. In the fall a meeting of agents and more than 200 representatives of farmers was held at Houston. Profits from the demonstrations were reported, and the benefits of pure seed, deep plowing, frequent shallow cultivation, and the growing of home sup-

plies were the chief topics discussed. In general, getting ahead of the weevil with early planting, early-maturing varieties, and treatment of the soil to promote rapid growth was the secret of success.

In 1905 the work was expanded to include Oklahoma and Mississippi.

In the early days agents worked in districts of 10 to 20 counties, and the demonstrations were carried on largely along the lines of railroads. The agents visited representative farmers, obtained their cooperation as demonstrators, furnished them with working plans, and instructed them in keeping records and making weekly reports. Each demonstrator was expected to grow from 5 to 20 acres of cotton under direction of the agent, who visited him at least once a month. Farmers met to see the demonstrations, and many of those present agreed to manage a part or the whole of their land under directions sent out by the department. Such farmers were called "cooperators," to distinguish them from the "demonstrators." A "demonstration" was the growing of a single crop under direction of the agent on a portion of the farm. The term "demonstration farm" was at first used to designate a farm on which there was a demonstration, but later was applied to a farm wholly worked according to the department's instructions.

In 1906 the farmers' cooperative demonstration work attracted the attention of the General Education Board (87). This board was established by John D. Rockefeller in 1902 and incorporated by Congress, January 12, 1903, "for the promotion of education within the United States of America, without distinction of race, sex, or creed." It was given broad power to establish schools of any grade or description, cooperate with associations, collect and publish statistics and other information, and use other means for public education. Mr. Rockefeller gave the board $1,000,000 in 1902; $10,000,000 in 1905 to promote higher education; $32,000,000 in 1907, one-third of which was for permanent endowment and two-thirds for objects to be determined by Mr. Rockefeller and his son; and $10,000,000 in 1909, when the board was given power to distribute the principal. In 1905 Miss Anna T. Jeanes gave the board $200,000 for assistance to negro rural schools in the South. Wallace Buttrick was secretary of the board. This organization planned to help universities and colleges in different parts of the United States and to give more general aid to education in the Southern States, supplementing the work carried on there with the Peabody and Slater funds. The Southern Education Board, which was the outgrowth of several annual conferences for education in the South held under the direction of Robert C. Ogden, cooperated.

The general policy established by the General Education Board for its work in the South was to cooperate with the leaders there and not to interfere with their enterprises. Beginning with the fall of 1902 it held conferences and made surveys in the Southern States, collecting a great mass of information regarding economic and educational conditions there. It found 85 per cent of the population in that region living in rural communities with a low average income for farmers. In some Southern States the average farmer's income was about $150 per annum, as compared with more than $1,000 in

Iowa. The officers and members of the board, who were acquainted with the results of this survey and had themselves visited the South, felt that "more favorable economic conditions must be attained before comprehensive school systems could be supported by taxation." It was, therefore, necessary to give the adult farmers of the South such practical education as would enable them to secure larger returns for their labor.

To determine what the board might hope to do in this direction, its secretary visited agricultural schools in the United States and Canada, including MacDonald College near Montreal, the Ontario Agricultural College, at Guelph, and the State agricultural colleges in Wisconsin, Iowa, and Texas. His visit to the Texas college occurred when Professor Knapp was lecturing there, and he was favorably impressed with Professor Knapp and his plan of demonstration work. The chairman and the secretary of the board, therefore, had a conference with Professor Knapp and Secretary Wilson at Washington. It was Professor Knapp's opinion that if demonstration work could be started in a State, county, or community with outside funds it would soon get local support and would spread, with the ultimate result that the "teaching of agriculture and domestic arts would become an accepted feature of rural education."

Government funds for demonstration work were at that time appropriated for combating the cotton boll weevil and were not available for strictly educational purposes. The board could, therefore, supplement these funds and work on the same plan, in the general field of agricultural education. This it determined to do, and an agreement for this purpose was signed April 20, 1906, by the secretary of the board and the Secretary of Agriculture. In this agreement it was provided that "the farmers' cooperative work, in which the General Education Board is to become interested, shall be entirely distinct in territory and finance from that carried on solely by the Department of Agriculture" and that "the United States Department of Agriculture shall have supervision of the work and shall appoint all special agents for this extended territory in the same way that they are now appointed and that the said agents shall be under control of said department in every respect as fully as any of the agents of the department." Under this agreement the Government funds were used for demonstration work in weevil-infested States and the board funds were used for similar work in States which the weevil had not yet reached. The work was, however, managed as an administrative unit in the Bureau of Plant Industry, with Professor Knapp as the special agent in charge. The money furnished by the board was used in paying the salaries and expenses of agents where adequate funds for these purposes were not available from State and local sources. Agents paid from board funds were given Department of Agriculture commissions as collaborators at salaries of $1 per annum. This gave them official status and enabled them to use the franking privilege for official business.

In 1906 the number of demonstration agents irrespective of the territory they served was 24, of whom 4 were paid by the General Education Board; in 1908 there were 157 agents in 11 States, of whom 85 were paid by the board. The number of agents in the several States was as follows: (1) Federal agents in Texas 28,

Louisiana 13, Arkansas 12, Oklahoma 8, Mississippi 4; (2) board agents in Mississippi 19, Alabama 17, Virginia 17, South Carolina 15, North Carolina 13, Georgia 7, and 1 each in Arkansas, Louisiana, Oklahoma, and Texas.

On November 12, 1906, the first county agent, W. C. Stallings, was appointed in Smith County, Tex. His appointment resulted from a local demand for more demonstrations and more information than could be given by agents whose territory included several counties. That year the ravages of the boll weevil had been severe, and many men in Texas and Louisiana were giving up farming. Business men came forward with proposals to pay a large share of the expenses involved in employing agents to give their whole time to a single county. In three counties in Texas and two parishes in Louisiana they offered from $750 to $1,000 to obtain the services of an agent.

Referring to this matter in his report to the department in 1908, Professor Knapp said:

> A few demonstration farms scattered throughout the county,—say five or six, such as would be the case where one agent had charge of seven or eight counties,—do not create sufficient public sentiment and moral force to change the long-established usages of the masses. There must be at least five or six demonstration farms and quite a number of cooperators in each township so that practically we reach every neighborhood, arouse interest and competition everywhere, and arouse the whole community. To do this requires at least one agent in each county (*94*).

In the Yearbook of the Department of Agriculture for 1909, Professor Knapp explained the general plan of organization and administration as follows:

> The farmers' cooperative demonstration work is conducted by a special agent in charge, who reports direct to the Chief of the Bureau of Plant Industry. There are five general assistants and a full office force; also a corps of field agents is employed, classified according to territory in charge, as State, district, and county agents. These agents are selected with special reference to a thorough knowledge of improved agriculture and practical experience in farming in the sections to which appointed. The county agents are appointed mainly on the advice of local committees of prominent business men and farmers conversant with the territory to be worked. Each agent has in charge the practical work in one or more counties, strictly under such general directions as may be issued from the central office at Washington, D. C. District agents are expected to have not only a knowledge of scientific agriculture, but to be practical farmers and to have had considerable experience in the demonstration work. State agents are strong and capable men, who have shown their ability to carry out successfully the instructions of the central office over a large territory, and they are especially qualified for the work by the possession of the tact necessary to influence men (*90*).

With larger funds and greater local support from farmers, bankers, and business men the number of agents increased rapidly. In 1910 the work was in progress in 455 counties in 12 States, and there were 450 agents.

Early in the demonstration work agents had attempted to interest and instruct negro farmers, and a considerable number of these farmers profited by observing the demonstrations and changed their farm practices for the better. There was soon a growing demand for negro agents, who could work more closely and sympathetically with people of their own race and adapt the demonstrations to the special needs of their people. This feeling was voiced by the institutes for negroes at Hampton, Va., and Tuskegee, Ala., which were

giving special agricultural instruction to some of their students. With the cooperation of these schools and with money furnished by the General Education Board two negro agents were employed near the close of 1906. These men, J. B. Pierce and T. M. Campbell, are still in extension work as field agents of the Office of Cooperative Extension Work. About two years later South Carolina, Georgia, and Mississippi were added to the States having negro agents, and in 1911–12, 33 negro agents were employed. These agents supervised demonstrations in the growing of cotton and corn, and encouraged the planting of home gardens, the keeping of hogs, cows, and poultry, the use of improved machinery, the whitewashing of buildings, the cleaning up and embellishment of houses and yards, the taking of farm papers, and other practices valuable to farmers. (See also p. 189.)

In 1913 the white and negro agents supervised 102,718 adult demonstrators and cooperators, and for the crop season of 1912 definite reports were received from 29,593 adult corn and cotton demonstrators. Their records covered 212,484 acres. The average yield on these demonstration farms was 1,054.8 pounds of seed cotton and 35.4 bushels of corn per acre, as compared with the general average in those States of 579.6 pounds of seed cotton and 19.6 bushels of corn.

As stated by Professor Knapp in 1909, "the aim of the farmers' cooperative demonstration work is to place a practical object lesson before the farm masses, illustrating the best and most profitable methods of producing the standard farm crops, and to secure such active participation in the demonstrations as to prove that the farmers can make a much larger average annual crop and secure a greater return for their toil" (*90*). The main factors involved in this work were set forth in what were known as Knapp's "Ten commandments of agriculture."

(1) Prepare a deep and thoroughly pulverized seed bed, well drained; break in the fall to a depth of 8, 10, and 12 inches, according to the soil, with implements that will not bring too much of the subsoil to the surface. The foregoing depths should be reached gradually.

(2) Use seed of the best variety, intelligently selected and carefully stored.

(3) In cultivated crops give the rows and the plants in the rows a space suited to the plant, the soil and the climate.

(4) Use intensive tillage during the growing period of the crops.

(5) Secure high content of humus in the soil by the use of legumes, barnyard manure, farm refuse and commercial fertilizers.

(6) Carry out a systematic crop rotation with a winter cover crop.

(7) Accomplish more work in a day by using more horse power and better implements.

(8) Increase the farm stock to the extent of utilizing all the waste products and idle lands of the farm.

(9) Produce all the food required for the men and animals on the farm.

(10) Keep an account of each farm product, in order to know from which the gain or loss arises (*94*).

In answer to criticisms that all the instructions were issued from Washington and were not adapted to southern conditions, Professor Knapp said:

This is not correct. The instructions given out for this work are made upon the following plan: First, a compilation of all experiments, relating to a given crop, by the experiment stations in the cotton States, is carefully made. For example: All the experiments in relation to the preparation of the soil, the

planting and the cultivation of cotton are compiled. Then the experience in planting, of a large number of the best cotton farmers in the South along the same lines of work in cotton is carefully noted. In addition to this the observation and experience of all the traveling agents of this department are brought to bear upon the instructions, to correct any defect that may be in them. Thus our instructions have the following elements of perfection: First, what the department at Washington knows from its vast stores of information about cotton; secondly, what the State experiment stations in the South have demonstrated to be the most advantageous; thirdly, what the best farmers in the South have tested and proved the most successful upon the farm; fourth, the knowledge obtained by the traveling agents of our demonstration work, who especially visit and have personal knowledge of every portion of the States in which they are stationed. Even then our instructions are along lines of correct principles, leaving many details to the good judgment of the farmers (94).

BOYS' CLUBS

From the time of beginning demonstration work a few specially interested and capable boys were used as demonstrators. The boys' club movement in some Northern States (see p. 38) was attracting attention in the South. In 1907 a club was organized in Holmes County, Miss., by W. H. Smith, a school superintendent, later employed for club work by the United States Department of Agriculture. The following year county agents or school officers formed a few clubs in several counties and States. Professor Knapp saw the advantages of having boys supplement the work of the adult demonstrators. Among other advantages the demonstration work would be brought into cooperation with the schools, which would tend to continue and enlarge the cooperation of the General Education Board. He therefore, in 1909, undertook the systematic organization of the boys' club work and charged the State, district, and county agents with its supervision and expansion.

The objects of these clubs were stated by him as follows:

(1) To place before the boy, the family, and the community in general an example of crop production under modern scientific methods.

(2) To prove to the boy, his father, and the community generally that there is more in the soil than the farmer has ever gotten out of it; to inspire the boy with the love of the land by showing him how he can get wealth out of it by tilling it in a better way and keeping an expense account of his undertaking.

(3) To give the boys definite, worthy purposes at an important period in their lives and to stimulate a friendly rivalry among them.

(4) To furnish an actual field example in crop production that will be useful to rural school teachers in vitalizing the work of the school and correlating the teaching of agriculture with actual practice.

* * * * * * *

Corn was selected for the first demonstrations, because it is a plant that can be profitably produced in most sections of the United States. The boys throughout the country have common knowledge of it from childhood, and the lessons seem easy. Corn yields more food to the acre in most sections of the United States, when properly handled, than any other grain crop. Food for men and animals is one of the first necessities. Cheapness of production is an important item. The growing of more and better corn in the South is necessary for better farm conditions. It forms part of a proper rotation for soil building and will furnish feed for a more extended livestock industry. It is the foundation crop for home use in most of the Southern States. Its more extensive growth will encourage diversification.

It was made plain that—

The farmers' cooperative demonstration work is not undertaking the organization of these clubs to teach agriculture in the public schools, but it is

seeking through its field force to instruct boys in practical agriculture on the farm.

* * * * * * *

The demonstration work undertakes to create in the schoolboy a love of the farm and a new hope by showing the wonderful possibilities of the soil when properly managed and the ease with which wealth and distinction are achieved in rural life when science and art join hands. This is worked out by the cooperation of the demonstration workers, the county superintendent of public instruction and the rural teachers (*94*).

The club work must be a real part of the demonstration work and must promote the general objects of that enterprise. Therefore, it must be standardized on a practical farm basis. Each boy must grow an acre of corn and keep a definite account of his labor and expenses. He must also make an exhibit of his product and write a history of his club enterprise. The parents must agree that the crop and its proceeds shall belong to the boy. The club work is to be a competitive enterprise with local, county, and State prizes. The basis of award, worked out in Professor Knapp's office and generally followed in the Southern States, is as follows in percentages: Yield 30, showing of profit 30, history 20, and exhibit 20. Professor Knapp encouraged competition by clubs and by counties, rather than altogether as individuals.

As the enrollment grew, badges, pennants, banners, and regalia with uniform insignia were introduced. These things and the prizes were paid for by voluntary contributions. "The awards took the form of cash, pigs, plows, colts, calves, shotguns, books, bicycles, implements, hats, clothing, trips, and scholarships" (*94*). Club teams received blue ribbons, certificates, and diplomas, granted by school and college officers, State superintendents of education, governors, and occasionally by the Secretary of Agriculture. Agricultural colleges and high schools offered short courses. Special club features were given at State, county, and local fairs. A notable exhibit of the products of club work was made by 100 southern boys at the National Corn Exposition in 1910. Boys who were prize winners were often able to sell corn for seed for $2 to $4 per bushel. "The first prize trip to Washington was offered by Professor Knapp personally to the club boys in Mississippi when he was on a visit there. It was the beginning of many interesting prize trips to the Nation's Capital, to fairs, livestock shows, colleges, and other places" (*94*). In 1909 four boys made the trip to Washington, representing respectively Arkansas, Mississippi, South Carolina, and Virginia. In 1911 boys who made this trip organized "The all-star corn club."

Boys' corn clubs obtained much publicity, especially when the yields on individual acres of club members ran, in a few cases, above 200 bushels and, in hundreds of cases, up to 100 bushels, while the average yields greatly exceeded those for the general crop. The emphasis put on boys' yields led in some cases to the use of extraordinary means to produce the large crop. It became necessary to restrain the tendency to get the biggest yield at all hazards, and to lay more stress on the quality, the relatively low cost of production, the business ability displayed in disposing of the crop, and other valuable qualities. The enrollment mounted from 12,500 in 1909 to 46,225 in 1910 and 95,000 in 1913.

The clubs became firmly established as a permanent feature of demonstration work. There was an increasing desire to have the

clubs undertake the growing of other crops, especially by those boys who had made a success of their corn projects. By 1913 there were many cotton clubs and a few kafir-corn clubs, principally in Texas and Oklahoma. Some pig clubs had been formed in cooperation with the Bureau of Animal Industry. Club work was an important development, bringing about closer relations between the agricultural colleges and farmers' cooperative demonstration work. In 1909 cooperative agreements for the supervision of boys' club work were made with the agricultural colleges in Alabama, Arkansas, Mississippi, and Georgia, when a State boys' club agent represented both the college and the Federal Department of Agriculture. By 1912 there were nine State colleges which had a definite connection with the club work.

GIRLS' CLUBS

The girls' canning clubs of the South originated in Aiken County, S. C., early in 1910. Miss Marie Cromer, teacher of a rural school, went in December, 1909, as the representative of Aiken County, to the annual session of the school-improvement association. At this meeting a representative of the United States Department of Agriculture talked about boys' club work and made some suggestions regarding the field for girls' club work. Miss Cromer promptly attempted to organize a girls' club, and by the spring of 1910 had 47 members enrolled. Each girl was instructed to grow one-tenth acre of tomatoes. A portable canning outfit was purchased, and as the tomatoes ripened it was moved from place to place in the county. Canning parties were held at which some mothers and some boys helped. A social picnic followed the canning. This work attracted much attention in the county, and many spectators came to observe the canning and the products. When this was brought to the notice of Professor Knapp, he called Miss Cromer to Washington, and she was appointed special agent by the Department of Agriculture. By invitation of a prominent woman she spent some time in New England and acquired useful information at institutions giving instruction in home economics.

Meanwhile a representative of the Department of Agriculture, O. B. Martin, was sent to Aiken County to aid the girls in canning. They also had an instructor from the State woman's college (Winthrop College) at Rock Hill, S. C., and the cooperation of the county school superintendent and business men. Similar work was undertaken that year in two or three counties in Virginia by Miss Ella G. Agnew. In all about 300 girls were members of "tomato clubs" in 1910. The General Education Board cordially approved this work and provided funds for its systematic organization and expansion. Girls' clubs were organized in more than half the Southern States in 1911, and in all the States having demonstration work in 1912. The garden and canning work was expanded to two or more kinds of vegetables and fruits, and some poultry clubs were begun. The agricultural colleges gave the assistance of various experts, and 157 women with some training or experience in home economics were employed as collaborators and came to be known as home demonstration agents. During the next two years the work grew rapidly.

The nature and extent of the work in 1914 are shown in the following extracts from the annual report for that year:

The enrollment for 1914 was 33,173. Of these club members 7,793 put up 6,091,237 pounds of tomatoes and other vegetables from their tenth-acre gardens. These products were put into 1,918,024 cans, jars and other containers. They are estimated to be worth $284,880.81 and nearly $200,000 of this is profit. The average profit per member was $23.30. Furthermore, these girls put up thousands of dollars worth of other products from the farm and orchard.

In many counties the results of the work from an economic, as well as an educational point of view, are large enough to attract attention. Ninety girls in Alamance County, N. C., put up 55,165 cans and jars, valued at $7,039.65, from their tenth-acre gardens; 136 girls in Etowah County, Ala., put up 46,533 containers worth $5,970.17. In Hamilton County, Tenn., 102 girls put up $14,240 worth of fruits and vegetables, but, of course, this represents the surplus of the farms and orchards as well as their own little gardens. In Barnwell County, S. C., the girls' club grew and sold more than $2,000 worth of pimiento peppers, and the club of Polk County, Fla., put up and sold about $7,000 worth of guava products.

Special work has been done with peaches, berries, figs, scuppernongs, mayhaws, agritos, oranges, kumquats and many other fruits of the South. Nearly 3,000 girls now belong to poultry clubs. Many of the best trained club members are succeeding with winter gardens. In all of these activities, the women on the farms have given active help. Fiscal officers, school officers, and teachers have cooperated in many ways.

The individual records of thousands of the club members were excellent in 1914. Hester Sartain, of Walker County, Ala., grew 7,037 pounds of tomatoes. She put up 1,620 cans, jars and bottles and the entire output, at market prices, was valued at $221.35, of which $146.20 was profit. Cora Brown, of Polk County, Ga., produced 5,290 pounds and made a profit of $144.61. Lois Robertson, of Comanche County, Tex., realized a profit of $193, counting 4,868 pounds of tomatoes grown in her garden and the fruit she put up from the farm and orchard. Many other records were almost as good (*94*).

HOME DEMONSTRATION WORK FOR WOMEN

As the girls' club work progressed the women in the homes reached by this work took an increasing interest and actual part in it. Once admitted to the homes, tactful home demonstration agents found many opportunities to aid the women with whom they came in contact. The demonstration records of 1914 point out the course of development of home demonstration work as follows:

It has been a process of evolution along natural lines. Many of the county women agents are using the canned products which the girls have put into the pantry, and the poultry products, which have been grown by the mothers, to demonstrate simple, useful lessons in cooking. In some counties the agents have already enrolled from 75 to 100 women demonstrators and each one has a homemade fireless cooker. Creole chicken has been the first lesson, because in preparing it both garden and poultry products are needed. Some agents have been successful in having the women demonstrators do egg grading and form egg selling associations.

Following the work with garden and poultry products the agents easily get to demonstrations in bread making and also in butter making. Incidental teaching in sewing comes in making uniform caps, aprons, and dresses. The girls make these things and embroider the "4-H" club emblem upon them. Of course the mothers help. In all the home work the agents have familiarized themselves with the most useful conveniences and helpful utensils, and especially those that can be made at home. The whole program naturally leads to home sanitation and beautification. It is easy for an agent, who has the confidence of the girl and her mother, to get fly screens put in, and even to install simple and inexpensive water works. It has been found most desirable to follow a well-defined program, but all along the line, good agents find hundreds of opportunities to give advice and make suggestions which lead to better living (*94*).

GENERAL DEVELOPMENT OF THE FARMERS' COOPERATIVE DEMONSTRATION WORK

On June 30, 1913, there were 920 persons engaged in farmers' cooperative demonstration work in the Southern States. Of this number 721 were employed in the adult demonstration and boys' club work, and 199 were engaged in the girls' canning and poultry club work. A year later the total number of men and women agents was 1,138. The funds used in the various forms of demonstration work in the Southern States in 1914 aggregated $970,479. Of this amount, $371,800 came from the Federal Government, $187,500 from the General Education Board, and $411,179 from State, county, and local sources.

The increase of funds and agents from year to year between 1904 and 1914, inclusive, is shown in Tables 2 and 3 (*196*):

TABLE 2.—*Expenditures from all sources, farmers' cooperative demonstration work, 1904 to 1914, inclusive*

Fiscal year	United States Department of Agriculture, lump funds	General Education Board	Other funds	Total
1904	$27,316.04			$27,316.04
1905	40,163.29			40,163.29
1906	37,677.80	$7,000.00		44,677.80
1907	39,976.73	31,200.00	$2,800.00	73,976.73
1908	85,901.48	69,000.00	4,200.00	159,101.48
1909	102,898.30	76,500.00	14,297.00	193,695.30
1910	219,107.37	102,000.00	33,714.41	354,821.78
1911	243,246.61	120,000.00	76,622.46	439,869.07
1912	335,856.29	128,000.00	175,054.13	638,910.42
1913	330,014.92	142,050.00	272,668.57	744,633.49
1914	371,800.28	[1] 187,500.00	411,179.21	970,479.49

[1] Actual expenditures from Oct. 1, 1913, to June 30, 1914.

TABLE 3.—*Agents engaged in farmers' cooperative demonstration work since its beginning in 1904 to 1914, inclusive, in cooperation with colleges, counties, and local organizations*

State	1904[1]	1905[1]	1906[1]	1907	1908	1909	1910	1911[2]	1912[2]	1913[2]	1914[2]
Texas				20	28	55	65	71	134	116	133
Oklahoma					8	16	30	34	54	54	67
Louisiana				9	13	44	46	49	60	54	68
Arkansas				6	12	28	50	54	68	71	80
Mississippi				7	23	37	40	54	78	68	80
Alabama				5	17	32	43	83	95	91	101
Georgia					7	28	53	57	86	99	112
Florida						2	14	14	40	40	61
South Carolina					15	27	43	56	69	68	84
North Carolina					13	24	51	51	73	91	108
Virginia				2	17	24	28	50	65	79	92
Maryland									6	7	18
Tennessee							1	10	23	40	49
Kentucky											43
West Virginia											42
Total	15	20	25	49	153	317	464	563	851	878	1,138

[1] Estimate. No records available to show the actual number in each State.
[2] Includes women agents.

As the boll weevil advanced and the work expanded, changes were made in the territory in which funds of the General Education Board were used. In 1914, with 14 Southern States engaged in demonstra-

tion work. Government funds were used in Alabama, Arkansas, Florida, southern Georgia, Louisiana, Mississippi, Oklahoma, Tennessee, and Texas; the board funds were expended in northern Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. Beginning with 1910–11, funds for this purpose were appropriated by the legislatures of Alabama, Florida, South Carolina, and Virginia. In 1909 Mississippi passed a law authorizing county boards of supervision to appropriate funds to be used in paying a part of the salaries of county agents. Later Alabama, Arkansas, Louisiana, North Carolina, Texas, and Virginia passed similar laws. Numerous boards of trade and other business organizations, as well as individual farmers, bankers, merchants, and others, contributed to the support of this work.

As shown by his article in the department Yearbook for 1909, Professor Knapp realized that considerable time would be required to convince the farmer that the plan followed in the demonstrations could be safely used in the management of his whole farm. When he was convinced that the new methods would increase the yield of his principal crops, he might be led to broaden the scope of his work by including demonstrations (1) in conserving and enriching the soil by the use of legumes and winter crops which would involve rotation of crops, green manuring, and prevention of soil erosion; (2) in the value and uses of barnyard manure and commercial fertilizers; and (3) simple methods of drainage; (4) improvement of pastures and meadows, the most economical grain crops for feeding work animals, and the raising of livestock for meat production. Thus demonstration work would approximate a graded educational system. Agents would also be called upon to give much incidental instruction on improvement of the rural homestead, roads, and schools, and on social affairs as well as on technical matters relating to fruit and vegetable growing, insect pests, and other subjects.

> The farmers' cooperative demonstration work may be regarded as a method of increasing farm crops and as logically the first step toward a true uplift, or it may be considered a system of rural education for boys and adults by which a readjustment of country life can be effected and placed upon a higher plane of profit, comfort, culture, influence, and power.
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> There is much knowledge applicable and helpful to husbandry that is annually worked out and made available by the scientists in the United States Department of Agriculture and in the State experiment stations and by individual farmers upon their farms, which is sufficient to readjust agriculture and place it upon a basis of greater profit, to reconstruct the rural home, and to give to country life an attraction, a dignity, and a potential influence it has never received. This body of knowledge can not be conveyed and delivered by a written message to the people in such a way that they will accept and adopt it. This can only be done by personal appeal and ocular demonstrations. This is the mission of the farmers' cooperative demonstration work, and it has justified its claims by the results (*90*).

Seaman A. Knapp died April 1, 1911. He had lived to formulate and direct the development of approximately the whole system of farmers' cooperative demonstration work. Its organization and main lines of work had become fixed and were ready to carry the great expansion of the next three years. Its management passed to his son, Bradford Knapp, who was thoroughly imbued with the principles which had guided his father, had an intimate acquaintance

with the general conditions and details of the enterprise, and was possessed of ability to adjust himself to new situations. Under his guidance the work expanded rapidly and was conducted in some respects on a broader basis.

At the outset the farmers' cooperative demonstration work was exclusively a Federal enterprise and was developed through a highly centralized organization. Great care was taken to safeguard the plan and organization of the work in cooperative arrangements with the General Education Board and other agencies. The work was planned and followed up in detail in the central office, and definite instructions were sent out to all the agents.

The choice of agents was based on their knowledge of State and local conditions, their practical experience with the kind of agriculture and rural organization with which they were to deal, and their ability to select demonstrators and to keep them at work within the limits of their instructions.

While there was considerable informal contact with the State agricultural colleges and experiment stations, definite cooperative relations with these institutions did not come about immediately. The colleges and stations, on the one hand, did not look with favor on extension work in their territory, planned without their advice and carried on by the department. They also objected to the linking of extension work with State departments of education or agriculture. The demonstration organization, on the other hand, feared that the colleges might be influenced too much by theoretical knowledge and in some cases might demand changes in the plan of work laid down for the agents. These attitudes resulted in unfortunate situations which might have been avoided had there been more sympathetic relations between the two agencies. As the demonstration work proved successful and increased in variety and scope, particularly after the introduction of the boys' and girls' clubs with definite educational features, the agricultural colleges were led to take a more active interest.

In 1909 an agreement was made between the Alabama Polytechnic Institute and the Bureau of Plant Industry for the joint employment of a " demonstration expert " with an office at the college. This agent's work, as stated in the agreement, was to include " demonstrations in agriculture at public schools, high schools, and other educational institutions, including boys' demonstration work guided by school officers and teachers; aiding and encouraging boys' demonstration work and other forms of agricultural teaching by correspondence, by attending superintendents' and teachers' institutes, and in such other ways as opportunity may offer; giving suggestions to school officers on courses of study and reading in agriculture; encouraging school garden work; and aiding the director of the Alabama experiment station in such features of farmers' institutes and shorter courses at the colleges as are directly in line with the duties above specified." L. N. Duncan was appointed to this position with the title of professor of extension in school agriculture.

That year a similar arrangement was made with the State agricultural college at Raleigh, N. C. At the same time the college and the State department of agriculture agreed to aid the work of the State agent of the farmers' cooperative demonstration work, and

his office was moved to Raleigh in 1910. This agent was C. R. Hudson, a graduate of the Alabama Polytechnic Institute, who had been appointed to organize the Federal demonstration work in North Carolina in 1907. He arranged for the first demonstration in that State on the farm of Mrs. W. W. Smith near Raleigh, and intended to have his headquarters in that city. But when the college received him coolly and refused to give him office space, he established his headquarters at Statesville. The State department of agriculture established a division of demonstration work in 1907, which carried its work independently, but in 1909 reported that it was cooperating with Professor Knapp in four counties.

In the annual report of the farmers' cooperative demonstration work to the General Education Board for 1909, it was stated that similar cooperative agreements had been made with the agricultural colleges in Arkansas, Georgia, Louisiana, and Mississippi.

On the other hand, the longer the demonstration work was continued the more problems arose which were too difficult for the agents, often persons of comparatively limited technical training. The State colleges and experiment stations were much closer than the Federal Department of Agriculture to the people in the agricultural communities. The influence of these institutions could not be disregarded in matters relating to agricultural progress. Bradford Knapp appreciated this, and under his management the demonstration work was brought into closer relations with the State agricultural institutions.

In January, 1912, the first comprehensive arrangement with a State agricultural college was made when Clemson College in South Carolina agreed to carry on its extension work jointly with the demonstration forces in the State. That year similar agreements were made with the agricultural colleges in Texas and Georgia, and in 1913 with those in Florida, Virginia, and North Carolina. Thus, gradually, the way was opened for a broader and, on the whole, more satisfactory system of extension work throughout the South.

The immediate success of the farmers' cooperative demonstration work was due in large measure to the unusual personality of Seaman A. Knapp. To his broad educational outlook, his practical experience in agricultural affairs, and his intimate knowledge of economic and social conditions in the South were joined a profound sympathy with the heavily burdened people on the farms and his great ability to bring people of all classes to his way of thinking by persuasive conversation and eloquent public address.

His clear, definite, and limited program appealed strongly to farmers and business men alike. Most southern farmers were held in the grasp of a credit system by which the banker and the merchant were vitally interested in the agricultural success of their debtors and were able to bring strong pressure on them to force adoption of means for making the discharge of their obligations more sure. Object lessons, such as the demonstrations, were necessary that great numbers of the southern farmers might be led to change their practices. Their desperate situation, at the time the demonstration work began, made them ready to accept outside aid and follow instructions of Government agents. The great leader of this movement was able to inspire his agents and the cooperating farmers with a deep sense

of the missionary character of their enterprise and loyalty to the principles and methods inculcated in their instructions. The movement had, therefore, many of the elements of a crusade to deliver southern agriculture from disaster and to relieve a deeply distressed people.

The agents and the people with whom they came in contact were led to believe that demonstration work had a higher mission than simply to teach the farmer to double his crop and increase his income. It was also to promote thrift; bring about better homes, schools, and churches; and improve the social and moral conditions of country life.

Aside from the conditions which made the demonstration system peculiarly applicable to the then existing situation in southern agriculture and country life, it brought to light certain fundamentals which permanently enriched agricultural extension work. The most important of these contributions were (1) the emphasis laid on the active participation of the farming people in demonstrations conducted for their benefit and (2) the establishment of the county agent system, under which farming people make use of trained official helpers permanently located near them, from whom they may receive the useful knowledge possessed by these agents and also instruction from the institutions which the agents represent.

FARM-MANAGEMENT EXTENSION WORK

The Office of Farm Management was organized in the Bureau of Plant Industry in 1906 to conduct on an enlarged scale work begun by that bureau several years earlier. It had authority and funds "to investigate and encourage the adoption of improved methods of farm management and farm practice." Agents were placed in districts, usually comprising two or more States, to investigate farm-management problems and to study the prevailing types of farming. Distribution of bulletins, farmers' institutes, newspaper publicity, demonstration tests, and field meetings on typical farms were some of the extension methods used to encourage the wider adoption of the more profitable types of farming and improved farm practice. Within a few years all the States were included in this work, which was usually conducted in cooperation with the agricultural colleges and experiment stations and wherever possible with organizations of farmers.

In 1909, demonstration tests of new varieties of corn, legumes, and other crops on individual farms, under supervision of a farm management agent, were begun in cooperation with the Ohio State Experiment Station, in four districts in that State. On March 1, 1910, an agent paid by the bureau was employed to carry on similar work in Bedford County, Pa. (see p. 76).

By a cooperative arrangement with the chamber of commerce of Binghamton, N. Y., the Delaware & Lackawanna Railroad, and the New York State College of Agriculture, on March 11, 1911, an agent was employed in Broome County and adjacent counties in New York. The headquarters of this work were in the farm bureau of the Binghamton Chamber of Commerce. This term was soon adopted by organizations of farmers supporting the county-agent

work in New York, and was then taken up by similar organizations in other States. A more detailed account of the development of this work is given in a succeeding chapter (p. 76).

The appointment of county agricultural agents in the North and West was promoted by various private organizations, with or without cooperation with the Office of Farm Management. This movement spread rapidly in a number of States. It was soon apparent that the farmers would object to having these agents controlled by commercial interests.

The Bureau of Plant Industry then determined to make an effort to expand the county agent and boys' club work in the Northern States, under public auspices and in cooperation with the agricultural colleges. As a result, the agricultural appropriation act of August 10, 1912, carried authority "for farm demonstration work" in connection with the item for the support of the Office of Farm Management, and about $161,000 was provided for this new work. Cooperative arrangements were made during the fiscal year 1912–13 with the colleges in 20 States, involving the employment of 113 county agents. Boys' corn-club work was also cooperatively begun in two States. Other States were added the following year, and on June 30, 1914, 203 county agents were thus employed in the Northern and Western States.

In its county extension work, the Office of Farm Management stressed each agent's studying the business of farming in his county in order to know the agricultural situation and the needs of the farmers, and urged basing the extension program on the needs revealed by such studies. Through special State and Federal farm management demonstrators, county agents were taught to analyze the business of farmers, to determine the strong and weak points of the farm system, and to aid the farmer in making needed adjustments.

PRIVATE AGENCIES PROMOTING COUNTY AGENT WORK

Chambers of commerce, boards of trade, and similar organizations in New York City, Philadelphia, Baltimore, Chicago, St. Louis, and other cities in the North Central States formed a council of North American grain exchanges (*119*). At a meeting of the council in New York City, September 12, 1910, Manning W. Cochrane, president of the St. Louis Merchants Exchange, read a paper on seed improvement. This led to the appointment of a committee on seed improvement by James Bradley, of Chicago, president of the council. As chairman of this committee, Mr. Cochrane called a conference at Chicago, October 11, 1910, "to discuss ways and means to interest all organizations in a national movement to obtain a larger yield of better grain." At this meeting were two officers of the United States Department of Agriculture, one each from agricultural experiment stations in Illinois and Missouri, two officers of the German Government, and four seedsmen, besides representatives of seven railroads, four industrial concerns, seven papers, nine boards of trade and the millers' national federation. So much interest was aroused in this meeting that the committee authorized its secretary, Bert Ball, to correspond on this matter with many organizations, and invite them to the next meeting of the council, in Chicago in

February, 1911. At this meeting the council voted to indorse the action of the crop-improvement committee (*120*) and to appoint joint committees to cooperate with it. The committee then held a meeting February 8, 1911, at which there was a larger representation of the boards of trade, grain associations, railroads, newspapers, and commercial concerns, together with officers of the United States Department of Agriculture; the experiment stations in California, Kansas, Maryland, Missouri, and North Carolina; and State departments of agriculture in Illinois and Missouri. The Federal Department of Agriculture was represented by M. A. Carleton, cerealist, and O. H. Benson, who was on his way to Washington, D. C., to assist in boys' and girls' club work.

The secretary of the committee reported that meetings in the interest of seed improvement had been held in eight States and that "seed-grain suggestions" prepared by Professor Wiancko, of Purdue University, had been printed and large numbers had been distributed to millers to give to farmers.

There had also been much agitation for seed improvement among bankers, manufacturers, grain dealers, and farmers' institutes. Agricultural trains had been run, seed germination was being taught in schools, and seed selection was being demonstrated by boys' corn clubs. Suggestions for outlining the work of the committee had been received from L. H. Bailey, E. G. Montgomery, and W. M. Hays. The president of the council, H. N. Sager, of Chicago, urged that contributions be made to broaden the work of the council of grain exchanges on this matter.

One of the results of this meeting was that Julius Rosenwald, of Chicago, offered to give $1,000 to each of 100 counties organizing for agricultural improvement and employing an agricultural agent. This money was to be expended through the council of grain exchanges. The committee on crop improvement added propaganda for county agents to its program conducted under the active leadership of its secretary. This committee became an important factor in the initiation of county-agent work in several States by rendering financial aid and by its work for publicity.

The Better Farming Association of North Dakota (*105*), promoted primarily by the Great Northern Railway, began active work November 15, 1911, with Thomas P. Cooper as secretary. This organization had 21 directors, of whom 3 were from Minneapolis, and an executive committee of 5 members, of whom 2 were from that city. In its articles of incorporation its objects are stated to be "dissemination of information and instruction in modern scientific methods as applied to agriculture, the promoting of better and more profitable cultivation of the soil, including rotations and diversification of crops, raising of livestock and poultry, and like subjects pertaining to the agriculture of the State." In his first annual report the secretary gave as the organization's primary object "to bring about the more general practice of permanent and profitable forms of agriculture and to develop the phases of farm life which will better rural agricultural conditions generally." The problems were, to a great extent, economic and social, including (1) maintenance of fertility, with new cropping systems and livestock; (2) new crops, like alfalfa and winter grains and corn; (3) business

reorganization of the farm for greater profits; and (4) improving the farm home, its surroundings, and social features. The plan of work was based on personal contact with individual farmers, and included field and livestock demonstrations and farm-management advisory work. With the aid of county contributions, the association aimed to put one or more agricultural experts in each county. During the year ended November 30, 1912, the association had received more than $52,000 from counties, districts, railroads, wholesale houses, implement dealers, lumber, elevator, and milling interests, banks, and the North Dakota Bankers' Association. In 12 counties in North Dakota and Minnesota 18 agents had been employed, who had worked with 2,436 farmers.

Beginning with January, 1913, the association cooperated with the Office of Farm Management. The work was broadened, and greater financial aid was received, but after two years it was considered best to put extension work in North Dakota on a public basis. The general direction of the work was therefore transferred to the State agricultural college, where Mr. Cooper was made extension director, and the better farming association was discontinued.

In South Dakota a better farming association was formed in March, 1912, with H. F. Patterson as superintendent. It was intended to confine its first year's work to Brown County, but other counties became interested, and three agents were employed during that year. From the beginning, this association had a nominal cooperation with the State agricultural college.

The General Education Board, which had contributed so largely to the farmers' cooperative demonstration work in the South, began in 1912 to give funds for county-agent work to the agricultural colleges in Maine and New Hampshire. This enterprise was carried on for a time after the passage of the Smith-Lever Act, but it was difficult to keep it separate from the general extension program under that act and it was therefore discontinued.

In Pettis County, Mo., and in DeKalb and Kankakee Counties, Ill., county-agent work was begun in 1911 by local organizations of business men and farmers (pp. 87 and 89).

EARLY DEVELOPMENT OF COUNTY-AGENT WORK IN NORTHERN AND WESTERN STATES

In the Northern and Western States the county-agent work developed under different auspices and organizations. To understand the movement in this great region, comprising 33 States, it is necessary to follow its origin and progress in several States where it had distinctive features. Brief accounts of the rise of county-agent work in about half these States are therefore given in the following pages.

PENNSYLVANIA

About the year 1907, A. B. Ross, a young corporation lawyer in Cleveland, Ohio, was advised to go on account of poor health to a quiet mountainous country and be much in the open air. He went to his childhood home in Bedford County, Pa. He rode about in a buckboard wagon and asked farmers many questions and gave them useful information. He obtained United States Department

of Agriculture bulletins, summarized them, and distributed mimeographed copies of these summaries. He bought seed corn and gave it to farmers who would follow his directions. He experimented with inoculation for legumes. The department sent a man to observe his experiments, and when Mr. Ross went to Washington, Professor Spillman offered him a nominal salary and the franking privilege. His employment as a Government agent began March 1, 1910. He was then able to continue and enlarge his work in Bedford County and vicinity and soon had a stenographer and an automobile.

In 1912 the agricultural extension department of Pennsylvania State College, in cooperation with the Office of Farm Management, began to promote the county-agent movement in that State, with the result that agents were employed that year in Blair, Butler, Montgomery, and Washington Counties. In 1913 agents were added in Bradford, Chester, Lancaster, and Mercer Counties, and early in 1914 in Berks County. In 1913 the legislature gave county commissioners authority to use county funds for this purpose, and this was done in all the counties with agents, except Medford and Lancaster. All those counties, except Bedford, had an active local organization, usually called a farm bureau, which assisted the agent and contributed to his support. In Bradford County the Pennsylvania Railroad gave $900 in 1914. That year the agents, called extension representatives, visited 4,100 farms, attended 810 farmers' meetings, organized 26 corn clubs, and influenced 40 students to attend college (*156*).

NEW YORK

In 1908 Secretary of Agriculture James Wilson made a tour of New York State and gave out the statement that he was greatly impressed with the so-called "abandoned farms" in some parts of that State (*149*). The report of the Country Life Commission in 1909, of which L. H. Bailey, then director of the New York State College of Agriculture, was chairman, strongly emphasized the need of improvement and redirection of agriculture and country life in the United States, and called attention to the importance of a broader system of extension teaching among farming people. At this time the New York College of Agriculture received a State appropriation of $10,000 "for extension work on farms." Charles H. Tuck, assistant professor of extension teaching, was put in charge of this work.

In 1909 George Monroe, of Dryden, N. Y., agent of the Bureau of Soils, began demonstrations with lime and clover on "abandoned farms" in Tompkins County, N. Y. The following year three other farmers were employed to carry on demonstrations with farmers in Yates, Steuben, Tioga, and Broome Counties.

The agricultural extension work of the New York College of Agriculture grew in extent and variety until in 1911, the appropriation was increased to $50,000, and a department of extension teaching was formally organized under Professor Tuck. He was able to further develop the work, and in 1912 conferences of farmers were held in 10 counties, at which local representatives were selected to act as voluntary extension agents for their respective counties. Their duties were described in Professor Tuck's report that year as follows:

These county agents assist in arranging for various extension enterprises for the county, by way of giving advice to the local people and counsel to the college. The county agent affords a means of bringing the needs of the county to the attention of the college and of bringing the college into closer relationship with the people (*148*).

For example, the Herkimer County agent, appointed June 7, 1912, arranged for farm visits by college specialists, 12 lectures, 2 lecture courses, several cooperative experiments with farm crops, and an extension school. In 1913 there were such agents in 17 counties. Though the college called these local representatives "county agents," or "county advisers," they had no relation to the agents employed by the farm bureaus, and ceased to function after the bureaus became well established.

During the summer of 1910, as a result of the report of the Country Life Commission and of Secretary Wilson's interest in abandoned farms, Byers H. Gitchell, secretary of the chamber of commerce of Binghamton, N. Y., began agitation for a department in the chamber, devoted to "extending to farmers the same opportunities for cooperation now enjoyed by the business men of this city" (*112*). Through its traffic manager, George A. Cullen, the Delaware, Lackawanna & Western Railroad became interested in this movement and planned to establish a demonstration farm along its line. A farm for this purpose was selected by the State agricultural college, which also made a plan for its management. Mr. Cullen went to Washington, D. C., to consult Secretary Wilson, and while there met Professor Spillman, then in charge of farm management work. Professor Spillman advised against the demonstration farm, but called attention to the county-agent work in the South and suggested that such a worker be employed in Broome County. Meanwhile, some farmers attracted by this movement had joined the Binghamton Chamber of Commerce. The chamber of commerce appointed a committee, whose members made a tour of Broome and contiguous counties, accompanied by men from the New York State College of Agriculture, and the National and State Departments of Agriculture. The committee included three farmers, a wholesale grocer, and a certified-milk producer. This party saw both good and bad farming in this region, and concluded that something should be done to inform all the farmers of the opportunities afforded by agricultural science and good farm practice. "Whatever work undertaken must be local, concentrated, and continuous" (*143*).

After further study of this matter, in which the New York State College of Agriculture joined, it was agreed that a "farm bureau" should be established in the Binghamton Chamber of Commerce, with a farm agent in charge, and that the enterprise should be jointly financed by the chamber, the railroad, and the United States Department of Agriculture. The college would aid with advice and encouragement. It was planned—

to undertake propaganda work in the agricultural district in the vicinity of Binghamton, N. Y., to make an agricultural survey of the territory, study the farmers' problems, find their solution by a study of the practices of successful farmers, study the relation of types of farming to local conditions of soil, climate, markets, etc., demonstrate systems of farming used by successful farmers of the district, and conduct demonstrations with farmers, do educational work through the media of institutes, etc., advising with the farmers indi-

vidually and otherwise as to the best methods, crops, cropping systems, stock, labor, tools and other equipment (*112*).

John H. Barron, a farm-reared man and graduate of the New York State College of Agriculture, was selected for this position and established his office in the chamber of commerce, March 20, 1911. His district at first covered the country within a radius of 50 miles around Binghamton, and included Broome, Chenango, Cortland, Delaware, and Tioga Counties in New York, and Wayne County in Pennsylvania. On July 1, 1912, his work was limited to Broome County. With a horse and buggy he rode about the district to meet the farmers and learn the conditions and needs of agriculture and observe country life in that region. He sent out circular letters to farmers on the poll lists of rural districts, used the Binghamton papers, and attended grange and other meetings. When farmers began to come to his office he appointed community leaders, who organized meetings and obtained requests for demonstrations. A few demonstrations were made the first year, chiefly in pruning orchards and in the use of lime for pastures. The next year the farm bureau brought in five carloads of lime. A few local study clubs were formed, which met fortnightly, usually in schoolhouses.

In the winter of 1912 the State legislature, in response to requests from Broome County, authorized county boards of supervisors to make appropriations for farm improvement. Under this law Broome County contributed $1,000 for the work of the farm bureau. For some time the farmers were rather indifferent. "They felt that something was being done for them * * * in which they had little or no part" (*112*). They believed that the railroads and business men were acting from selfish motives in another attempt to help the farmer produce more food while the chief interest of the farmer was in getting more money for what he produced. Mr. Barron was a member of the grange. This and his experience and practical interest saved the day, but most farmers merely tolerated him.

Mr. Barron resigned January 1, 1913, and was succeeded by E. R. Minns. On October 10, 1913, at a county-wide meeting of farmers held in cooperation with the State leader of farm bureaus at the agricultural college, the Farm Improvement Association of Broome County was formed, with James Quinn, master of the Pomona Grange, as president. Its objects were (1) to foster cooperation in the buying and selling operations necessary to farming; (2) to assist in the operation and promote the usefulness of the Broome County Farm Bureau; (3) to publish for circulation in the county information about the most useful agricultural practices; (4) to promote the interests of the breeders of improved livestock and the more profitable production of milk from dairy herds; (5) to promote agricultural contests held under competent supervision throughout the county; (6) to hold meetings for the commercial, educational, and social benefit of all persons in the county interested in farming. Subcommittees were appointed on purchase and use of lime and fertilizers, interests of breeders of purebred livestock, keeping of production records of dairy cows, and conduct of agricultural contests. This association cooperated with the farm bureau of the Binghamton Chamber of Commerce.

On October 13, 1914, at a meeting of 20 farmers, the Broome County Farm Improvement Association voted to take over the farm bureau. A slow growth in membership followed, which in 1916 included only 125 persons. By 1921, however, there were about 1,500 members.

The Chemung County Farm Bureau was established April 1, 1912, with G. P. Scoville as agent (*116*). This was due to the influence of Mr. Cullen, of the Delaware, Lackawanna & Western Railroad, and his railroad cooperated with the Elmira Chamber of Commerce and the United States Department of Agriculture in financing the bureau. Each of these organizations contributed $1,200, and the organization received $1,000 from the Crop Improvement Committee of Chicago. The agent had a commission from the department and was thus subject to the supervision of the Office of Farm Management. Otherwise he was left to himself, for no local or State organization was responsible for the bureau. On August 29, 1913, the Chemung County Farm Bureau Association was formed, but was merely advisory to the county agent. In the spring of 1914 it undertook the purchase of fertilizers and other farm supplies. In August, 1914, at the suggestion of the State director of farm bureaus, arrangements were made for the association to take charge of the financing and management of the farm bureau, and this was done January 1, 1915. The county board of supervisors then appropriated $1,000 for the use of the bureau. The Elmira Chamber of Commerce continued to give office room. Mr. Scoville resigned to be State farm management agent on September 1, 1914, and it was not until November 15 that M. E. Chubbuck succeeded him, coming from a similar position in Herkimer County. During the first three years the most important work of the agent in this county was the farm survey, in which about 500 records were taken, and twice as many farms were visited.

In Jefferson County, following a farm survey by the State agricultural college in 1911, some leading men in conjunction with the board of supervisors decided during the winter of 1912 to organize a farm bureau (*159*). The cooperation of the United States Department of Agriculture, the State agricultural college, and the State department of agriculture was obtained. The bureau was organized April 14, 1912, with headquarters in the Watertown Chamber of Commerce. Its objects were (1) to coordinate community agricultural interests, (2) to organize community forces, (3) to give encouragement and aid in the development of community buying and selling, especially to bring buyers and sellers into closer touch, (4) to study local economic conditions, (5) to demonstrate better farm management and farm produce, and (6) to give advice and assistance on various agricultural subjects. Its income in 1913 was, from United States Department of Agriculture, $1,000; New York State, $600; county board of supervisors, $1,000; Chicago Crop Improvement Committee, $1,000; New York Central Railroad, $60 and a pass for the agent. The bureau had an executive committee of 7 members and an advisory committee of 35, 1 from each grange or town. The first agent was F. E. Robertson. For two years he traveled his county with a horse and wagon. He participated in grange meetings and 26 farmers' institutes, organized three cow-testing associations, cooperated with the district school superintendent in organizing boys' corn

and potato clubs and with the county agricultural society in exhibits and demonstration plats on the fair grounds, held a boys' stock-judging contest at the county fair, held two extension schools in cooperation with the State agricultural college, and went with a plant-improvement train. He also arranged many field demonstrations on the use of lime and fertilizers, plant breeding, seed selection, ditching, and orchard improvement. The bureau had a labor-employment department and started a pure-seed and livestock exchange.

In Clinton County the agricultural bureau of the Plattsburg Chamber of Commerce grew out of a meeting held October 26, 1912, when officers were elected to take charge of such work (*151*). C. B. Tillson was elected county agent and probably began work in December, 1912. At a meeting held February 2, 1913, letters were sent to 150 men inviting them to become members, but only a few paid dues, which were $3 that year. When the dues were reduced to $1 in 1914 there were 382 members. In 1913 the publication of a Farm Bureau News was begun. On April 3, 1913, the purchase of an automobile for the agent was announced. That year the county made its first appropriation of $1,000 to the bureau. The constitution of the farm bureau association was adopted January 4, 1916.

In Oneida County a farm-improvement association was organized November 1, 1912, by the cooperation of the Utica Chamber of Commerce, county board of supervisors, the New York Central, the Lackawanna, and the Ontario & Western Railroads, the Borden Milk Co., and the United States Department of Agriculture (*151*). Its first manager was G. W. Bush, a graduate of Cornell University. Its first constitution as a farm-bureau association was adopted in 1916. Its office remained in the Utica Chamber of Commerce until 1919, when it was transferred to the county courthouse.

In Herkimer County the first meeting advocating the organization of a farm bureau was held under the auspices of the Herkimer Business Men's Association November 15, 1912, at which time the Crop Improvement Committee of Chicago agreed to give $1,000 for two years provided a local organization was formed (*151*). The Unitel States Department of Agriculture also offered cooperation. The Herkimer County Farm Improvement Association was, therefore, formed, a temporary constitution was adopted, and the annual dues were fixed at 50 cents. The first agent, M. E. Chubbuck, a graduate of Pennsylvania State College, began work December 1, 1912. The first year about 100 members were enrolled, the county appropriated $1,200, and an automobile was provided for the agent. The Herkimer County Farm Bureau Bulletin was first issued in February, 1915.

The seventh to organize was Niagara County (*103*), where the farm bureau elected E. H. Anderson as county agent January 18, 1913. This county had a long history of progressive movements in agriculture, in which the county farmers' club, the county agricultural society, and the granges played an important part. In 1910 92.5 per cent of the land on its farms was improved. The chief agricultural interest of the county had passed from wheat to livestock, and then to the growing of apples, peaches, pears, and plums. In 1910 it led all the New York counties, except Wayne, in the production of fruit. There was a tendency to specialize too much.

Better cultivation and spraying were needed rather than more orchards. In the summer of 1912 some of the leading men of the county became interested in the farm-bureau movement and secured the support and financial aid on which to base such an organization. For the first two years the bureau had from the United States Department of Agriculture $1,200, from the New York State Department of Agriculture $600, from Niagara County $1,000, and from the New York Central Railroad $60 and a pass for the county agent. The Lockport Board of Trade furnished an office. The objects of the farm bureau association were (1) to federate the agricultural interests of the county, (2) to develop its natural resources and adapt crops to local conditions, (3) to aid in the organization of cooperative associations for the purchase of farm supplies and for packing and marketing fruit, (4) to demonstrate better methods of farm practice and management, (5) to discuss subjects of general importance to farmers in meetings and local papers, and (6) to give advice on various agricultural subjects.

The organization of farm bureaus in New York was now proceeding so rapidly that on March 1, 1913, the State college of agriculture, in cooperation with the United States Department of Agriculture, appointed Lloyd S. Tenny, State leader of county agents. As a member of the college staff he had other duties, including the maintenance of "a supervisory relation with former students in respect to their farming operations." At the time of his appointment there were county agents in nine counties, and nine others were added during that year.

A State act of May 24, 1913, appropriated $25,000 "for the purpose of assisting in the organization and contributing toward the support of farm bureaus in the various counties of the State and in the supervision thereof by the commissioner of agriculture: *Provided, however*, That no farm bureau shall receive more than six hundred dollars ($600) per annum" (*150*). No bureau could obtain this State money unless the county appropriated through its board of supervisors, or otherwise raised, at least an equal amount for its support. The act also authorized the commissioner of agriculture "to make rules and regulations for the organization of such county farm bureaus."

(This law was changed in 1917 to provide for joint supervision of the county agents by the State college of agriculture and the State department of agriculture. In 1919 provision was made for allotting $500 per annum for home-economics work in a county. This amount was increased under the act of April 23, 1924, to $600, and the same amount was added for junior extension work. The county appropriation necessary for obtaining the State fund had been increased, and in this final act was not less than $2,500 for each of the three lines of work. This act gave to Cornell University "as agent of the State in the administration of the New York State College of Agriculture," general supervision of "the cooperative agricultural and home-economics extension and development work" provided for in the act.)

After the passage of the farm-bureau act in 1913 the State commissioner of agriculture agreed to joint supervision of the farm-bureau work by his department and the college of agriculture, and

Mr. Tenny added this supervision to his other duties. This did not, however, include control of the county agents. In Circular No. 1 of the Farm Bureau of New York State, he states that "the county agents have no official connection whatever with any of the State institutions" (*162*). They are, however, collaborators of the United States Department of Agriculture. They are largely under the control of committees of local residents. The State leader expressed himself as willing to cooperate with any county wishing to organize a farm bureau and to assist the county agents by advice and visits. To receive the State fund the county agent must be approved by the State leader.

In most organized counties at that time farm-bureau associations were financed from $1 dues, from $600 to $1,500 or more from the county, and nominal sums and passes from the railroads. Ten counties were generally receiving $1,200 from the United States Department of Agriculture. In several counties a large share of the farm-bureau funds came from farmers, merchants, bankers, granges, and chambers of commerce.

Mr. Tenny recommended that the county agent should have the support of an active organization, with an executive committee prepared to meet at least monthly and to select and aid the county agent. The qualifications of the agent should be (1) farm training; (2) broad agricultural training, preferably a complete college course; (3) successful experience in agricultural work, preferably farming; and (4) a pleasing personality. He need not be an office man, institute lecturer, or experimenter. He must be able to work with groups and especially must be able to make farm surveys and determine labor income. His office should be near a trading center, and he should spend at least one day a week there. The office should be open other days, with a stenographer or other person to attend to callers. For this reason it had often seemed best to locate the agent in a chamber of commerce.

The State leader went so far as to make definite suggestions for a constitution and by-laws for a county farm bureau association. Its objects should be "to develop better agriculture * * * and to foster all interests, commercial, social, and material, having a bearing on the development of agriculture" (*162*).

The county agent should be an officer of the association. The executive committee should have seven members, including the president and treasurer of the association ex officio, a district superintendent of schools, a member of the Pomona Grange, a member nominated by the county board of supervisors, and two members of the association. This committee should outline the general policy of the association, fix the salary of the county agent, make cooperative arrangements with the agricultural college, and transact all business. The county agent should be put under the general supervision of the State leader.

Mr. Tenny resigned December 1, 1913, and on January 1, 1914, M. C. Burritt was appointed professor of extension teaching and director of farm bureaus. H. E. Babcock was appointed assistant director. The number of organized counties with agents increased to 26 during 1914, and there were farm-bureau associations in all but 3 of these counties.

The New York plan for county-agent work had become well established before the passage of the Smith-Lever Act. It aimed to put the responsibility for the organization, management, and conduct of the work on the farmers themselves. To this end, the farmers were expected to form a farm-bureau association, which should be nonpartisan and nonsectarian and open to all farmers who desired to join, and should contain not less than 10 per cent of the farmers in the county. The association would furnish the farmers of the county (1) means for collective action, (2) local machinery for carrying on extension work, (3) organized local direction and support for such work, and (4) a local clearing house for all activities and organizations promoting agriculture and country life. The organization of the association would include a president, vice president, secretary, treasurer, a small executive committee, and a larger advisory council representing organizations and communities within the county. The executive committee would represent the association in its dealings with other organizations, in the selection and support of the county agent, and in other business transactions appropriate to the work of the association.

To carry on extension work the association would unite with the State college of agriculture and, through it, with the National and State Departments of Agriculture in the formation of a county farm bureau, which would thus be a cooperative institution both in management and financial support. The four organizations which were partners in the farm bureau would agree on their respective relationships, a plan of work, a financial budget, and at least one agent to carry on the work of the bureau within the county.

The chief functions of the county farm bureau were (1) the development of personal initiative in farming people of the county, (2) the organization of forces to deal with specific problems of agriculture and country life, and (3) the carrying out of a program of agricultural improvement by county meetings, field demonstrations, demonstration meetings, exhibits at fairs, and other means.

The county agent of the bureau would be responsible to the executive committee of the association and the State director of farm bureaus. He would be the leader and organizer of the work of farmers within the county and of the extension work of the college and the United States Department of Agriculture. As he was, in a sense, the executive officer of the farm bureau, the county agent in New York was called its manager. This was an unfortunate term, as it implied a control which he did not possess and seemed to be contrary to the general policy of putting responsibility for the work on the cooperating farmers. It was out of line with the nomenclature adopted in other States, where a similar officer was usually called a county agent.

The three official partners in the farm bureau were represented ordinarily by the State director of farm bureaus or his assistant. The functions of the central office at the agricultural college were (1) to carry on the administrative work required by State and Federal laws relating to farm bureaus, (2) to assist in organizing farm bureaus, (3) to draw up and put into effect state-wide and regional agricultural projects, (4) to advise and assist county agents on their projects, (5) to acquire, arrange, and distribute technical and popular informa-

tion relative to this work, (6) to establish and maintain cooperation with other related agencies, and (7) to investigate the organization, methods of work, and administration of local farm bureaus to determine which were most effective.

As director of the New York State College of Agriculture, L. H. Bailey had been intimately associated with the farm-bureau movement in that State. His views regarding this movement, as expressed in an address before the Erie County Farm Bureau on March 17, 1914, have therefore an historical interest and are summarized here (*104*). He believed that the people should be responsible for the farm bureau and that its most important function is the discovery and stimulation of local leaders. A resident agent in the county is important as the source of useful information and as a leader of agricultural progress. He should not be called a "farm adviser," but should point the way to project meetings, policies, and methods of work; should bring in specialists and have an office where facts pertaining to agriculture would be assembled and distributed. The work must fit local conditions, and some kind of a survey is needed as a basis. The agent must facilitate buying and selling by aiding the organization and work of cooperatives. He should also standardize cropping. "Administration follows funds." If farm bureaus become effective, local funds will increase, but there must be supervision. The farm bureau must not be partisan, sectarian, or commercial, but must be educational. General oversight should come from an educational institution. Public membership in the farm bureau is best. Support by chambers of commerce is "a passing phase." Financial support locally is desirable but should be supplemented by county, State, and United States funds.

NORTH DAKOTA

In North Dakota the better farming association (see p. 75) made arrangements for county-agent work in 1912 and 1913, by which the county agreed to make appropriations for three years to offset the fund granted by the association (*105*). In this way 12 counties and 3 smaller areas were organized the first year. The counties first organized were Bottineau, January 7, 1912, with M. B. Johnson as agent and Stutsman, January 27, with A. F. Borchert as agent. That year in this State there were 84 field demonstrations of crop rotation on from 20 to 150 acres each and 643 demonstrations with new or special crops on small fields. Seed-corn selection was stressed during September. Principally in the spring before field work was commenced, 218 farmers' meetings were held, and 34 farmers' clubs, on a family basis, were organized, with meetings generally in farm homes. Assistance was given to 15 local or county fairs. A boys' encampment was held at the State fair July 22–27, 1912, with the cooperation of the agricultural college.

In 1913, with the cooperation of the United States Department of Agriculture, the number of county and other field agents was increased to 25, and there were 180 farmers' clubs. A woman was employed as field agent and promoted the installation of conveniences in the farm homes, the rearrangement of kitchens, and better sanitation. At Jamestown a rest room was provided by business

men but was operated and supported by country women. The number of demonstration fields was increased to 1,283, with 5,105 farmers cooperating, and 747 meetings were held. Boys' encampments were held at Valley City and Grand Forks and a winter short course for boys was given at Minot. The agents had influenced the building of 81 silos. A cow-testing association was organized in Barnes County.

Two counties were already making appropriations for this work under a law permitting the levying of a tax to encourage immigration, when the State legislature passed an act in 1913 giving county commissioners the privilege of levying not to exceed one-half mill tax for demonstration field work within the county. The agricultural college supplanted the better-farming association in the general supervision of county-agent work, but the same general plan of work was continued. With the aid of county appropriations, by June 30, 1914, there were 21 agents working in 16 counties.

WISCONSIN

In Wisconsin county-agent work was begun in 1912 under the direction of the college of agriculture and the experiment station of the University of Wisconsin (*170*). In accordance with the terminology used in the Province of Ontario, Canada, the agents were called county agricultural representatives (*155*).

According to an article by L. W. Bridgman in the Wisconsin Agriculturist (*110*), August 13, 1914, the Canadian county-agent movement grew out of a discussion of agricultural education among Seaman A. Knapp, H. B. Frissell, principal of Hampton Institute, and C. G. Creelman, president of the Ontario Agricultural College, while they were on a boat trip in 1906. Soon thereafter a county agent was located in Texas (see p. 63), and a Hampton graduate began similar work among negroes in Virginia. On his return to Canada, Doctor Creelman took the matter up with the Ontario Department of Agriculture and in 1907 brought about the appointment of graduates of the Ontario Agricultural College to teach in high schools and conduct extension work therefrom in six counties in Ontario. At first these agents were called specialists, but by 1910 they were known as "representatives of agriculture" and "teachers of agriculture" in high schools. Their extension work included teaching in short courses and institutes for farmers, organizing farmers' clubs and cooperative associations, cultivating experimental plats, giving spraying demonstrations, school gardening, planning exhibits, publishing press articles, and other projects. In 1912 there were such "representatives" in 30 counties in Ontario.

The distinctive features of the Wisconsin plan for this work were (1) its close connection with the county agricultural and teacher-training schools and (2) its public welfare character as supported entirely by public funds. At first the agents had charge of agricultural instruction in the county schools and gave winter short courses in agriculture for farmers and farm boys, and in summer they gave direct aid to farmers at home. The college and the county each paid half of the salary and expenses of the agent. In Oneida County, E. L. Luther began work in February, 1912, in the county

house adjoining the county school at Rhinelander. His first duties were to instruct a class of 15 teachers and give a 10-week course for 17 boys. In March he gave a farmers' course with the aid of members of the college staff.

About 20 per cent of the farmers in the county participated in this course. At that time the county had only about 3 per cent of its land under cultivation. A survey showed acid soils, lack of rotation of crops, and little dairying. Demonstration plats showing the use of lime, alfalfa, and clover were planted on the county fairgrounds and on 64 farms; meetings were held in schools and churches; farmers' clubs and livestock and grain associations were formed.

In Eau Claire County, G. R. Ingalls began work in April, 1912, and gave special attention to cow testing and milk records. In Barron County, F. D. Otis became agent in August, 1912.

The Office of Farm Management began cooperation with the county-agent movement in Wisconsin, January 1, 1913, and contributed to the salary of the agents. The State legislature of 1912-13 passed the Potts county agricultural representative bill appropriating $10,000 to be used in 1914 and $16,000 in 1915. Under this law, when a county board of supervisors appropriates at least $1,000 for county-agent work and the college appoints an agent, $1,000 of the State appropriation becomes available for this work in the county. On June 30, 1914, there were nine county representatives in Wisconsin.

MISSOURI

In Missouri the first county to begin agitation for the employment of an agricultural agent was Pettis, where Sam M. Jordan, locally known as the "apostle of agriculture," began work April 15, 1912. He was born in a log cabin in Gentry County, Mo., October 7, 1860, and educated in rural schools and Stanberry Normal School. He taught in country and city schools and in the normal school. Ill health caused his return to the farm, and he was very successful in restoring a piece of worn-out land. Being interested in young people, he had boys' encampments on his farm. For four years he was farmers' institute lecturer for the Missouri Board of Agriculture. His "Story of a run-down farm" was especially attractive to farm audiences. In March, 1912, he was holding a farmers' institute at Sedalia. The results he describes as follows:

> The president and secretary of the Sedalia Boosters' Club were present and listened to the addresses, and were especially impressed [by] the questions asked by the farmers and their anxiety for information. On their return to the club rooms they concluded that "Pettis County needs these men not for a day or two in the year, but we need them all the year." As a result of this conclusion, they called the writer and asked him to come up to the club rooms, and in a short time the objects of the "call" were made known, and they asked me if I would consider a proposition to put [in] my entire time in Pettis County (*139*).

Mr. Jordan made a favorable reply to this proposition, and the executive committee within a few days raised the necessary funds. The county court decided that under an existing law it had authority to promote this enterprise and voted $1,500 for the work. The Sedalia school board agreed to pay Mr. Jordan $600 for one lecture a week before the high school. Farmers and business men subscribed

$900, furnished an office, and supplied stenographic help. The Crop Improvement Committee of Chicago donated $1,000.

Formal cooperation of the Missouri College of Agriculture and the United States Department of Agriculture, with financial aid, was begun January 1, 1913. Its constitution, adopted July 20, 1912, provided that an advisory council, consisting of 40 members, including 6 officers and 2 representatives from each township, should be the corporate body to plan and direct the general work of the bureau. The township members were expected to direct the organization and development of the bureau's work in their respective townships. Three men in each school district were selected to aid in carrying out the plans of the council. Members of the council were to be chosen annually by qualified voters in each school district at the time of the school election. All persons over 16 years of age might be active members of the bureau by the payment annually of $1 for the family. Associate members paid 50 cents. The officers of the bureau were a president, two vice presidents, a secretary, a treasurer, and a salaried manager. The executive committee consisted of these officers and three other members. There were also standing committees of three on seed production, crop reporting, preparing seed grains, marketing, rural schools, organization and finance, and honor committees, as follows:

> The Soil Builders, in which membership is limited to those farmers who can say that by their systems of farming they are making the soil more fertile; the Good Stockmen, open only to farmers using none but purebred sires in their livestock operations; and the Road Builders, in which any farmer who drags the roads is entitled to membership (*253*).
>
> The manager shall devote his whole time to efforts for the betterment of agriculture in all its branches throughout the county; devise work in farm and field experiments and demonstrations, the improvement of seeds and culture, and breeding of stock; hold farmers' meetings, deliver lectures, visit farms, test seeds and soils, give counsel and advice whenever called for and perform such other duties as directed by the advistory council. He shall attend the meetings of the council and at the annual meeting shall present a written report summarizing the work of the year. He shall receive such compensation for his services as the advisory council may determine (*139*).

Mr. Jordan's title was county farm adviser and manager of the Pettis County Bureau of Agriculture. He immediately began active work among the farmers of the county, and this enterprise attracted wide attention in the State and beyond.

Meanwhile at the College of Agriculture of the University of Missouri, D. H. Doane, assistant professor of farm management, was laying the foundation for a broader county-agent movement in the State. On March 12, 1912, after much consultation with Mr. Doane, Dean F. B. Mumford made recommendations to the university board of curators which included the following features:

> 1. To locate in a county a representative of the college of agriculture whose duty it should be to work with the farmers in developing the agriculture of that county.
>
> 2. This extension representative to be paid partly by the college of agriculture.
>
> 3. This county representative to work under the direction of the college of agriculture, but all projects for agricultural betterment in a county to be submitted to an official group of farmers and approved by them (*141*).

In Cape Girardeau County a group of men were already seeking to procure a county agent, and, through their efforts, 1,000 men peti-

tioned the county court to appropriate $1,500 per year for three years for this purpose. This request was granted June 15, 1912. After much discussion it was decided to hire the agent first and form a county organization later. C. M. McWilliams began work August 1, 1912, as "county farm adviser" and as a representative of the State college of agriculture and the United States Department of Agriculture. School district organizations were first formed to work with the county agent, and on April 26, 1913, the presidents of these community organization became the members of a county farm bureau, organized as a federation. In 1913 county-agent work was undertaken in Buchanan, Johnson, Jackson, and Scott Counties, and on January 19, 1914, in Greene County.

ILLINOIS

In Illinois the county-agent movement began in De Kalb County (*130*). Its origin has been traced back to Henry H. Parke, a college graduate and university teacher, who returned to a farm at Genoa in that county, gave time to farmers' institutes, and organized farmers' clubs throughout the county. About 1907 he suggested to W. W. Coultas, county superintendent of schools, that the county ought to have an agricultural specialist devoting his time to work there. Associated with him in this aim were J. H. Cook, president of the Northern Illinois State Normal School, George Gurler, for years with the Illinois Farmers' Institute, and leading farmers. In the winter of 1910–11, W. G. Eckhardt, of the Illinois College of Agriculture, who was doing farmers' institute work in that county, spent the day with Dillon S. Brown, of Genoa, who urged that an agricultural adviser should be employed. In the winter of 1911–12 a soil-improvement association was organized and incorporated. The banks of the county subscribed $2,000 per year for three years ($100 for each bank), the county board of supervisors appropriated $2,000 per year, and $6,000 was raised by subscription. This amount was allotted equally to 19 townships, and was raised by subcommittees of three men in each township. About 700 farmers, approximately one-third of the farmers in the county, were contributors to this fund.

The executive board of this association included bankers, dairymen, editors, the county school superintendent, the president of the normal school, a teacher, and one farmer from each township. It was understood that the services of the association would be free to any farmer in the county. Mr. Eckhardt was elected "specialist," and began work June 1, 1912. During the summer he visited 200 farms on request, and in the winter held meetings in schools, churches, and halls, with the aid of a stereopticon. Control of insects and plant and animal diseases was stressed. Soil and crop-improvement work was based on the soil survey of the Illinois College of Agriculture and its plan for the use of lime, rock phosphate, and clover. Upon farms owned by the members of the association demonstrations in field crops, soil fertility, animal breeding, and farm equipment were conducted by the county agent. These demonstrations were often used as centers for public meetings.

In Kankakee County, about May 1, 1912, a small group of farmers conferred on the formation of a county association (*127*). Then a

public meeting was held. After two weeks spent in discussion of this matter throughout the county, a temporary organization was formed, and the obtaining of a county agricultural adviser was considered. Within the next week, $12,000, to cover three years' expenses, was subscribed by farmers and business men. Then a permanent organization was formed, with officers and a board of directors. The Illinois College of Agriculture was asked to nominate an agent, and recommended John S. Collier, of the agronomy department. An office was established in the county courthouse, and a runabout automobile was purchased for the agent. The Crop Improvement Committee of Chicago contributed $1,000, and in November, 1912, the United States Department of Agriculture began to give $100 a month.

The agent chose 15 farmers in each township as demonstrators. He visited their farms, made a soil map of their fields, and took notes on the soil types, fertility, drainage, varieties of crops, position and character of buildings, and the social and economic conditions of the neighborhood. Soil samples were examined at a school in Kankakee, where a laboratory was equipped and a part-time analyst employed. In the fall, farmers in each township were called together for a conference, and the evening was given to social activities. A corn show was held, with cash prizes, contributed by Kankakee merchants, and lectures by agricultural college men and practical experts.

From February 3 to 8, 1913, a short course in agriculture was given in the courthouse to the young men's country club. Boys were taught to test corn and distinguish soil types. A pennant was given to the township having the largest number of boys enrolled for this work. Among prizes offered was a solid gold kernel of corn for each boy, under 21 years of age, who would raise 100 bushels of corn on an acre the following summer. Mr. Collier offered to pay the expenses of a short course in agriculture at the college for the first young man who would marry within the next year and take his bride to the college for a course in home economics. Saturday was office day for the agent, and he made a display of seeds, insects, farm magazines, and other exhibits. Seed corn was tested for members of the association at high schools in the county. There were cooperative purchases of seeds; and a slaughterhouse and a laundry were cooperatively established. Signs of membership in the association were posted on the farms. By such active work and somewhat spectacular methods, great interest in the association was soon aroused, and many farmers applied for membership.

Stimulated by the striking success of the De Kalb and Kankakee associations and agents, other counties in Illinois formed associations, and by June 30, 1914, there were 14 county agents in the State. They were supported by strong organizations, commonly called soil and crop-improvement associations. The membership in these associations was usually limited, in some cases to 300 men, and the annual dues were from $10 to $15. The agents, called agricultural or farm advisers, were chosen and controlled by the associations. The relations of the agricultural college with the associations were chiefly advisory, and only gradually cooperative. The Office of Farm Management contributed to the salaries of the agents and cooperated in

their work. While the services of the agents were nominally available to the farmers generally and the meetings held in the counties were usually open to the public, the members of the associations felt that they had a special claim on the activities of the agents, and the personal work of the agents with individuals was very largely given to the members.

MICHIGAN

In Michigan the initial stages of the county-agent movement were closely connected with the field studies and investigations of the Office of Farm Management. The first county agriculturist cooperatively employed by that office and the agricultural college was H. G. Smith, who began work in Alpena County, July 1, 1912. The other counties organized that year were Iron, September 1; Kent, September 16; and Kalamazoo, November 1. Eben Mumford was appointed State leader and began work October 28, 1912. In 1913 eight other counties obtained agricultural agents. The State was then divided into three districts with supervisors. At first, the organizations supporting the work of the agents were federations of farm organizations from all sections of the county. Chambers of commerce, banks, and various organizations of farmers also gave assistance to the agents and promoted their work.

KANSAS

In Kansas the county-agent movement goes back to the formation of the Progressive Agricultural Club at Leavenworth in 1911 (*136*). The aid of the State agricultural college was sought, subscriptions were obtained from farmers and business men, and the United States Department of Agriculture and the Crop Improvement Committee of Chicago cooperated. The first agent began work in Leavenworth County August 1, 1912. The Montgomery Farmers' Club obtained an agent for that county March 1, 1913; an agent for Cowley County was appointed March 1, 1913; for Allen County an agent was appointed May 1, 1913; in Harvey County a farm-improvement club was formed in preparation for a county agent, who was appointed June 1, 1913. These five counties each received $1,000 from the Crop Improvement Committee of Chicago for two years, and $500 from the United States Department of Agriculture. For the more sparsely populated portion of the State, four districts were organized in February and March, 1913, with an average area of about eight counties. Lyon, Lynn, Jewell, and Miami Counties received agents in May and June, 1914. The early agents in Kansas were appointed "to give instructions and practical demonstrations in agriculture and to help in securing the adoption of better organized farm practices and a richer social and educational life in rural communities in the State."

WEST VIRGINIA

In West Virginia a county agent was employed in Kanawha County in August, 1912, by the cooperation of the Office of Farm Management, the College of Agriculture of the University of West Virginia, and the Charleston Chamber of Commerce (*168*). In a

similar way agents began work in Wood County December 1, 1912, in Brooke County, April 24, 1913, and in Ohio County in April, 1913. On July 1, 1913, the cooperation with the United States Department of Agriculture was transferred to the Office of Farmers' Cooperative Demonstration Work, which brought West Virginia into the group of Southern States. Under this arrangement larger funds from the Washington office became available for this work in West Virginia, and 14 additional counties received agents prior to June 30, 1914. Encouragement was given to the organization of county agricultural societies, clubs, or farm bureaus, and such organizations were formed in 12 counties during this period; in the other 6 counties financial aid was given by popular subscription or through business organizations.

IDAHO

In 1910 the College of Agriculture of the University of Idaho organized an agricultural extension department for the southern part of the State, with headquarters at Boise (*135*). Cooperation was soon effected with the Office of Farm Managament, and demonstration farms were located at Caldwell, Gooding, Clagstone (Bonner County), and Aberdeen. In continuance of this cooperation, an agricultural agent began work in Bonner County August 19, 1912, and somewhat later in Lincoln County.

MINNESOTA

In Minnesota the influence of the Better Farming Association of North Dakota had much to do with the beginning of county-agent work in 1912 (*142*). The West Central Minnesota Development Association also actively supported the movement. The Crop Improvement Committee of Chicago contributed $1,000 toward the support of agricultural agents in several counties. There were also liberal local subscriptions by bankers and business men, as well as farmers. The Office of Farm Management of the United States Department of Agriculture granted $6,980 during the first year, and $1,797.71 was derived from the Minnesota Farmers' Institute, associated with the Department of Agriculture of the University of Minnesota.

The university, through the division of agricultural extension, assumed leadership in this movement and, in cooperation with the Office of Farm Management, appointed a State leader of county agents. When the State legislature passed the act of April 19, 1913, appropriating $25,000 for aiding the appointment of county agents in 1913, and $35,000 to be used in 1914, the law gave control of these and county funds for this purpose to the dean of the agricultural department of the university. Each county might receive not to exceed $1,000 a year, provided it contributed at least an equal amount. County commissioners were given authority to appropriate not to exceed $1,000 for county-agent work, and their approval was a necessary preliminary to the appointment of county agents, who must be satisfactory to the dean.

The first county agent in Minnesota was F. F. Marshall, a graduate of the Minnesota School of Agriculture and a successful farmer.

He began work in Traverse County, September 1, 1912. Agents were also appointed during that year in Stevens, Pope, Grant, and Otter Tail Counties. In 1913, agents were appointed in 16 other counties, and in 2 more counties in the first half of 1914. The formation of county organizations to support the work of the agents proceeded slowly in Minnesota, partly because there were over 300 local farmers' clubs. These clubs began to be formed in 1908, under the influence of the farmers' institutes, and from 1910, were promoted by the extension division of the agricultural department of the State university. By the time the county-agent movement began in this State, these clubs were so well established and so highly regarded by their members that they seemed in large measure to supply the need for organizations through which the county agents could work. The large part which business men played in the initiation of the county-agent movement in Minnesota caused many farmers to hold aloof from it. The movement, therefore, proceeded unsteadily, and such county organizations as were formed had, in some cases, to be reorganized with the farmers largely in control.

COLORADO

In Colorado county-agent work was begun October 1, 1912, in Logan County, by the appointment of D. C. Bascom, through the cooperation of the State agricultural college, the United States Department of Agriculture, the county commissioners, and the county high-school committee (*131*). Mr. Bascom was a teacher in the high school at Sterling. Under the cooperative agreement he was to give half his time to extension work. His office was at the school.

In El Paso County, W. H. Lauck, who had been an agent in the irrigation investigations of the United States Department of Agriculture, became county agent October 16, 1912, through the cooperation of the department, agricultural college, county commissioners, and the Colorado Springs Chamber of Commerce. The latter furnished an equipped office, stenographic help, and other aid.

In Pueblo County, Stanley V. Smith began work March 8, 1913, through the cooperation of the department, the agricultural college, and the Pueblo Commerce Club, which furnished an office and stenographic help.

A State act of April 13, 1913, authorized county commissioners, on petition of 100 taxpayers or farmers, to appropriate public funds for a county agriculturist, subject to the approval of the State board of agriculture, the governing board of the agricultural college. By June 30, 1914, eight county agents were employed in Colorado.

INDIANA

In Indiana the beginnings of county-agent work were closely connected with the activities of the agricultural extension division of Purdue University, established March 11, 1911, under the direction of G. I. Christie. This was in consequence of the passage of the State act of February 21, 1911, which gave $10,000 for the year ended September 30, 1911, and $30,000 annually thereafter "to promote the improvement and advancement of agriculture, domestic

science, and rural life, among the people of the several counties of the State of Indiana, and aid in the diffusion among the people of the several counties * * * of useful and practical information on subjects connected with agriculture, domestic science, and rural betterment" (*158*). County expenses for such work up to 25 cents per square mile must be paid by the county, when approved by the county commissioners. While this act referred especially to expenses for farmers' institutes in the counties, its wording was broad enough to include county-agent work as promoted by the Office of Farm Management. Purdue University, therefore, cooperated with that office in the employment of county agents in Indiana.

The first agent began work in Laporte County, October 1, 1912. His local expenses were paid by the "better farming association" of that county. A contribution was also received from the Crop Improvement Committee of Chicago. Agents were placed in Montgomery, Parke, and St. Joseph Counties during the first quarter of 1913. In the latter county 22 farmers met on October 14, 1911, and formed the Scientific Agricultural League. "The object of this league shall be the study of scientific farming and the promotion of all things pertaining thereto, as will be set forth in the duties of the different committees. Also scientific road-building, farmers' short courses and institutes, and the improvement of the rural school system" (*107*). Frequent meetings were held, lecturers on soils and crops were brought in, and a short course was conducted in February, 1912. The minutes of the league of June 15, 1912, show its intention to employ a salaried agent, in cooperation with the South Bend Chamber of Commerce. On April 1, 1913, it organized farm-bureau work in conjunction with the agricultural extension division of Purdue University and the Office of Farm Management.

In Indiana the organization of county farm bureaus began in March, 1913, with township units and special standing committees. This movement was greatly stimulated by the State vocational education act of February 22, 1913, which directed the county councils to appropriate $1,500 for the salary and expenses of a county agricultural agent whenever 20 or more residents of a county, actively interested in agriculture, filed a petition for such an agent with the county board of education and deposited $500. When the council has acted, the county board of education shall apply to Purdue University for the appointment of a county agent, subject to the approval of the county and State boards of education. The university must pay half the salary of the county agent up to $1,000. Not more than 30 counties in 1914, and 60 in 1915, were entitled to this State aid. The county agents were directed by this act to aid the county superintendents of schools and the teachers to give practical education in agriculture and domestic science; conduct boys' and girls' clubs and contests, as well as farm demonstrations; give advice to farmers; and cooperate with farmers' institutes, farmers' clubs, and other organizations.

The relations of the county agents with the public schools were quite intimate. In most counties, the agent had his office with the county superintendent of schools. The work of the county agent was also supported by better farming associations, county farmers' institute associations, township or community farmers' clubs, granges, gleaners, and other groups. The first annual conference of

county agents was held at Purdue University, October 13 and 14, 1913. By June 30, 1914, there were agents in 27 counties in Indiana.

WASHINGTON

In the State of Washington a "county agriculturist" began work in November, 1912, in Wahkiakum County. The Office of Farm Management provided $1,440, and the Pomona Grange $760 toward his salary and expenses. A State act of February 28, 1913, created a bureau of farm development, consisting of the director of the experiment station of the State college and the boards of county commissioners desiring to participate therein (*115*). The station director was ex-officio director of the bureau. At the request of a county board of commissioners, the director should appoint and assign to the county a competent agricultural expert, subject to the approval of the commissioners, who would fix his salary, not to exceed $2,400, and his term of office. The commissioners might, however, deal directly with the United States Department of Agriculture, in which case the director of the bureau must appoint the person recommended by the department and he would be subject to its control. The commissioners might appropriate annually not to exceed $3,600 for county-agent work. In the first two counties operating under this law a portion of the county-agent funds was raised by private subscription, but in the next five counties the work was supported wholly by county funds. By July 30, 1914, there were agents in Adams, Benton, Douglas, Spokane, Walla Walla, Wahkiakum, and Okanagan Counties. The divided responsibility for the supervision of county-agent work, which this State law permitted, hindered the satisfactory progress of work in the State of Washington, and conditions were not fully remedied until the law was repealed.

NEBRASKA

In Nebraska county-agent work was begun in Merrick County in 1912, followed the next year by Gage, Seward, and Thurston Counties, and, in the first half of 1914, by Madison and Dawes Counties (*145*). In all these counties, funds for this work were raised by membership fees in "county farmers' associations" and by subscriptions. The work in Merrick County was at first wholly supported by private funds, but afterwards the Office of Farm Management and the College of Agriculture of the University of Nebraska cooperated in the support of the county agents.

In 1913 a State act provided that upon a petition signed by at least 10 per cent of the farm landowners of the county, the county commissioners might appropriate funds for the support of a "county farm demonstrator" to work under the direction of the agricultural extension department of the University of Nebraska. "He shall cooperate with agricultural clubs and other associations and organizations whose object is the betterment of rural conditions throughout the county."

OHIO

In Ohio the basis for extension work in agriculture was laid March 25, 1895, when the Ohio Agricultural Students' Union (*106*)

was formed, following the example of the Ontario Agricultural and Experimental Union, composed of persons who had been students at the agricultural college at Guelph. Originally, this new enterprise was limited to students and ex-students of Ohio State University, but after the first year any farmer in Ohio might join in the work of the union. The university contributed a small sum for postage, printing, and minor expenses, and the Ohio experiment station paid for fertilizers, seeds, and publication of results. Very little was done the first year, but in 1896 there were tests or demonstrations with fertilizers; varieties of corn, oats, and potatoes; treating seed potatoes to prevent scab; mulching fruit trees; and spraying gooseberries for mildew.

In 1903 material for tests was sent to 434 farmers. That year it was decided to divide the enterprise into university extension to be carried on by the college, and research extension, to be managed by the experiment station. In 1903 A. B. Graham had organized in the schools in Springfield, Ohio, a club of over 80 members to undertake group tests, and in July, 1905, he was appointed superintendent of agricultural extension at the university. (See p. 46.) Meanwhile, in 1904, L. H. Goddard had been appointed experimentalist at the station, to organize a department of cooperative experiments (*133*). The individual tests were reduced from one-tenth to one-eightieth of an acre. A greater variety of tests was undertaken, and in 1909 the work included observation and quantitative tests on large and small plats, fair exhibits, and farm-management studies (*132*). There was cooperation in tests and exhibits with the county crop-improvement association in 14 counties. Two exhibits were prepared and displayed at 20 fairs. Cost of production studies of crops and livestock were made, together with farm examinations and limited agricultural surveys. M. O. Bugby, Gail T. Abbott, W. A. Lloyd, and W. M. Cook were in direct charge of the work in separate districts of about 20 counties each and were employed in cooperation with the Office of Farm Management. (See p. 73.)

The first county agent was employed by the Portage County Improvement Association in cooperation with the Office of Farm Management. A State act of May 3, 1913, created the Agricultural Commission of Ohio and transferred to it the general management of the Ohio Agricultural Experiment Station at Wooster. The State appropriation act of 1913 for the station included an item of $7,500 for "county agricultural agents." These funds were put under the control of the agricultural commission. A portion of this fund was used for the work already begun in Portage County and for additional work begun in 1913–14 in Geauga, Greene, Butler, Trumbull, and Montgomery Counties, where cooperating organizations for the promotion of agriculture were formed. Meanwhile, the station had undertaken to promote the establishment of county experiment farms. It was thought that the superintendents of these farms might also act as county agents. A trial was given to this practice in 1914, under direction of the agricultural commission, in Miami, Hamilton, Paulding, and Washington Counties. On February 15, 1915, the supervision of the county agents was transferred to the College of Agriculture of the Ohio State University at Columbus, "with the

reservation that in counties having county experiment farms the county agricultural agent should act as general superintendent of the experiment farm, a part of his salary being paid by the station and the remainder being provided for by the college of agriculture" (*153*).

MASSACHUSETTS

In Massachusetts, on September 1, 1912, a State leader was appointed by the cooperation of the Office of Farm Management and the Massachusetts Agricultural College. A "farm union" was organized in Hampden County, and on May 12, 1913, two agents were cooperatively employed in that county.

WYOMING

In Wyoming the movement leading to the appointment of county agents was begun in the fall of 1912, when the Office of Farm Management and the University of Wyoming agreed to appoint a State leader of farm management studies and demonstrations (*172*). On May 16, 1913, A. L. Campbell began work as county agent in Fremont County. His salary and expenses were paid by the Office of Farm Management, the county commissioners, the Fremont County Farmers' Association, and the Burlington Railroad. Under similar auspices, H. E. McCartney became county agent in Sheridan County July 11, 1913.

CALIFORNIA

In California a division of agricultural extension was established in the College of Agriculture of the University of California early in 1913, and B. H. Crocheron, who had been engaged in agricultural school work in Maryland, was made extension director. The college entered into cooperation with the Office of Farm Management, with a view to locating county agents (called agricultural advisers) throughout the State. About this time, a farm bureau was formed in Humboldt County, and in July, 1913, the college employed an agricultural adviser and, by cooperation with the farm bureau, placed him in that county, with headquarters at Eureka.

At that time the college began the formulation of a policy regarding county agents and farm bureaus in California, which, with some development in details, it has maintained ever since. The farm adviser was to be an agent of the college, a member of its faculty, and a joint representative of the United States Department of Agriculture. His salary would be paid by the college, and his expenses by agencies within the county. The county must provide at least $2,000 for the maintenance of an office and its equipment, use of an automobile, and travel expenses of the agent, before the college would place him in the county. Preferably, the county supervisors should supply the county fund for this work. The college would supply a farm adviser only on the request of a county, through a permanent organization of farmers formed to aid this agent; that is, a farm bureau. The farm bureau should have, as members, at least one-fifth of the farmers of the county. The annual fee was to be $1. The constitution and by-laws of the Humboldt County Farm Bureau

were used by the college to illustrate the character of the county organization it desired to have behind the farm adviser. This farm bureau was formed to promote the agricultural interests of this county and all its enterprises dependent upon agriculture.

The object of this organization shall be to assist the farm adviser in his work in the county and to aid him in the development of agriculture and such allied industries as may properly come within his province, including the betterment of social, home, school, and church conditions in the county.

Any person a resident of Humboldt County or an onwer of farm land in the county, interested and willing to aid in the development of the agriculture of the county, may become a member of this bureau by agreeing to this constitution and paying an annual membership fee of $1 and such other dues as may be regularly assessed (*123*).

The farm bureau would have as officers, a president, vice president, secretary-treasurer, four directors at large, and one director from each township elected by members living in the township concerned. The bureau should have an annual meeting; the officers should meet monthly at the office of the farm adviser. An organized township should be entitled to a bureau headquarters at which, on request, the farm adviser should be present at least once a month. By June, 1914, this provision for township directors and headquarters was changed so as to provide for 10 or more "farm bureau circles" within the county, each with a director and headquarters.

The farm adviser is required to serve any farmer in the county, whether a member of the farm bureau or not, but he is instructed not to visit any farm unless he is invited to do so.

The purpose of the farm bureau is, first, to demonstrate whether the farm adviser is really wanted by the farmers themselves, and, second, to create an efficient working agency.

The farm adviser does not seek to control or direct the action of any person. He gives to each person the best advice of which he is capable through the aid of the staff of the agricultural experiment station, but the initiative still rests with the person seeking the advice. If, for the successful prosecution of the methods advised, it is necessary to have concerted action, or if it is necessary to pass and execute laws, the people must take the next necessary steps, or the legislative and executive branches of the Government must create and execute such measures as the investigations of the station show to be warranted by the facts (*122*).

On this plan farm advisers were placed in Humboldt, San Diego, San Joaquin, and Yolo Counties prior to June 30, 1914.

UTAH

In Utah the first county agent began work in Carbon and Emery Counties on July 22, 1913, under a cooperative agreement between the Office of Farm Management and the State agricultural college (*167*). That year a State farm and home demonstration act was passed, appropriating $6,000 the first year, which amount was to be increased annually by $2,500 up to $25,000. This law directs the college to conduct demonstrations in the counties, through cooperation with the United States Department of Agriculture, county and State officials, corporations, and individuals. County funds up to $2,500 per year are to be used for county-agent work. A State leader was appointed, and by January 1, 1914, there were three county agents on full time, one employed during the summer, and one vacancy in Uintah Basin, which was filled April 1, 1914. The other counties having agents were Wasatch, Sevier, Millard, and Iron. On June 30, 1914, there

were eight county agents. Funds were furnished by the United States Department of Agriculture, the agricultural college, and the counties. The agents assisted in forming farmers' unions, through which they were to do much of their work.

DEVELOPMENT OF THE COUNTY ORGANIZATION SUPPORTING EXTENSION WORK

W. A. Lloyd, of the Office of Extension Work, North and West, described the development of the county organization as follows:

Coincident with the establishment of county-agent work in the North and West, there has developed a new type of farmers' organization having for one of its purposes the improvement of agriculture through cooperation with the agent. The form of this association and the method of organizing it differ to some extent in almost every State and in some cases even within the State itself. Recently there has been a decided tendency toward the standardization of these various organizations. They may be grouped somewhat as follows:

(1) Those having a central organization with a representative membership of farmers scattered generally throughout the county and paying an annual membership fee of from $1 to $10 each. Associations of this sort usually hold meetings annually and have a board of directors or an executive committee for carrying forward the business of the organization and an advisory council or other group of elected or appointed officials, who meet at stated intervals, usually monthly, to consult with the county agent in regard to the conduct of his work. Many of the organizations of this type are incorporated.

(2) Those having a central organization made up of delegates from township groups or other subordinate units. These local groups usually meet monthly and discuss matters of community interest, the county agent being present whenever possible. The central or delegate organization meets usually on the call of the president whenever there is important business to transact.

(3) Those having a central organization made up of delegates elected from various rural organizations already in the county, such as farmers' clubs, granges, farmers' unions, gleaners, the equity, etc. Such an organization is sometimes called a federation. These various associations hold their regular meetings and the federation committee which makes up the central association meets at stated intervals or on the call of the president, and exercises the functions of the advisory council in plan No. 1.

(4) Dissociated farmers' clubs without a central organization through which the agent extends his work.

In a few cases the county board of commissioners or supervisors have constituted the central organization and in a few others an agricultural committee of the chamber of commerce has been a local cooperating body. The fundamental purpose of all these forms of organization is the same—that of bringing together a number of interested people with whom the agent can work directly and who will assist him in planning his work and cooperate with him in his demonstrations. They are public-spirited citizens, the leaders, who give of their time and money for the public weal. The county agent needs such a body of representative farmers back of him, not so much for their financial support as for their moral support. Each of these types of organization has been successful in particular counties, but those partaking of the characteristics of the first group have been the most uniformly so in the North and West and those of the third group the least so. The chief difficulty with the federation plan is that the rivalries and jealousies often existing between the various local bodies tend to prevent harmonious cooperation. About 50 per cent of the associations originally formed for the purpose of cooperating with the agent have been reorganized along the lines of the first group, which seems to be successful under a great variety of conditions and probably forms the most satisfactory basis for county-agent work thus far evolved in the North and West. The success of the organization of whatever form is dependent on the following factors:

(1) The association should be made up essentially of farmers and managed by farmers. Urban people may be members but should not be officers and should not seek to control its policy or interfere in the execution of its plans.

(2) The association must have a serious purpose, a well-developed plan, and an active part in the execution of the projects undertaken by the county agent. It stands for organized self-help.

(3) The association of whatever type should be organized before the county agent begins work, and a committee appointed for the purpose should cooperate with the State county agent leader in the selection of the agent (*140*).

During the fiscal year ended June 30, 1912, only five county agents were appointed in cooperation with the Office of Farm Management. This number was increased by 113 in 1912–13, and by 90 in 1913–14. A number of counties had agents without such cooperation. There were also some counties which had agents for only a short time. In all, there were about 240 counties in 27 Northern and Western States, in which agricultural agents had been employed at some time prior to June 30, 1914. The number of such counties in the several States was approximately as follows:

California	4	Michigan	11	Ohio	8
Colorado	8	Minnesota	23	Oregon	10
Connecticut	1	Missouri	7	Pennsylvania	10
Idaho	2	Montana	4	South Dakota	3
Illinois	14	Nebraska	5	Utah	8
Indiana	27	New Hampshire	1	Vermont	7
Iowa	9	New Jersey	4	Washington	7
Kansas	9	New York	25	Wisconsin	9
Massachusetts	1	North Dakota	17	Wyoming	3

In the 15 Southern States on June 30, 1914, 1,138 men and women agents were employed in the farmers' cooperative demonstration work in 721 counties. In 42 States, 929 counties had the services of such agents at that time, and about 1,350 men and women were engaged in this county work.

HISTORY OF THE SMITH-LEVER EXTENSION ACT

During the first decade of the twentieth century, the work connected with the farmers' institutes and other forms of agricultural extension work in which the land-grant colleges participated, increased so rapidly in extent and variety that these institutions had great difficulty in meeting the demands on them in this direction without impairing their resident teaching and research.

A demand therefore arose for Federal appropriations for extension work, partly to stimulate increased State appropriations for this purpose. This wish was voiced by the committee on extension work of the Association of American Agricultural Colleges and Experiment Stations at the meeting at Washington, November 19, 1908, in a report by President K. L. Butterfield, as follows:

It is the belief of your committee that the chief means of stimulating the proper recognition and adequate organization of extension work in agriculture in our land-grant colleges is a Federal appropriation for the work. We are quite aware of the objections that may be made to this proposition—that we already have too much Federal supervision; that the Federal Treasury is inadequate to the demands made upon it; that is becoming too easy to rush to the Federal Government whenever money is desired for any public purpose; and that initiative should be left to the States. But there are fundamental reasons, so it seems to your committee, why we have a right, and, indeed, a duty, to ask Congress to appropriate money for this purpose. Extension work in the land-grant colleges differentiates itself sharply from research work on the one hand, and from the instruction of resident students on the other. There is little chance for argument upon the proposition that the organization of resident instruction in agriculture through the Morrill and Nelson acts and the organization of research and experimentation through the Hatch and Adams acts is chiefly responsible for the progress in agricultural education

that has been made during the past few decades. It is true that a few individual States had recognized their obligations and opportunities before any of these acts were passed. But what brought these types of work into well organized form, and what put them upon a substantial foundation, was the Federal appropriation. We can think of no argument that has ever applied or does now apply to Federal appropriations for agricultural colleges and experiment stations that does not equally apply to extension work, which is organic and vital in the development of the functions of the institutions which we represent.

We would not advocate a large appropriation for this purpose. We would suggest that the proposed law should make an appropriation of, say, $10,000 a year from the Federal Treasury *to each land-grant college for the purpose* of carrying on extension work in agriculture, and that the act be so framed that, after this appropriation has been made, there shall also be an appropriation, based on some per capita standard, made to the same institutions for the same purpose on condition that the States themselves appropriate equal amounts. Thus we would have effected a stimulus for well-organized extension work in every land-grant college in the United States. State initiative would not be destroyed, but rather stimulated. It would remain with the States themselves to determine how far they would care to go. In any event it would not be a heavy drain on their own treasuries (*1*).

The committee therefore recommended:

That each institution represented in this association organize as soon as possible a definite scheme of extension work in agriculture.

That the association organize a section of the association to be known as the section of extension work.

That the association favor increased appropriations for the United States Department of Agriculture for the purpose of making investigations into all phases of the work of disseminating agricultural information, and of assisting the States in every practicable way to organize the work under the best auspices.

That the association place itself on record in favor of a moderate Federal appropriation to be made to the land-grant colleges for the purpose of carrying on extension work in agriculture under a plan which requires the States also to make appropriations for the work.

That the association request Congress to extend the franking privileges to bona fide extension publications issued by the land-grant colleges.

Either the appointment of a joint commission representing the various agencies interested, to report upon the proper relationships of the extension work in agriculture to be carried on by the land-grant colleges to other agencies and institutions performing a similar service; or, if the association think it a wiser plan, we strongly urge that *specific authority be granted by the association to* this standing committee on extension work to make a study of this subject and to report on it at a future meeting of the association (*1*).

The first of these recommendations was approved. The others were referred to the section on college work, which took no action on them.

At the meeting of the association at Portland, Oreg., August 18, 1909, the committee repeated its recommendation for a Federal appropriation for extension work, and elaborated a plan for such Federal aid and the reasons for it, as follows:

A PLAN FOR A PROPOSED NATIONAL APPROPRIATION FOR EXTENSION WORK

(1) Appropriates $10,000 a year from the National Treasury to each State and Territory, for extension work in agriculture and rural life.

(2) Provides that at any time, after two years have elapsed from the date any State or Territory has accepted this appropriation and has actually organized extension work in connection with its land-grant college, there shall be available from the National Treasury, in addition to the amount named above, an amount of money for each State and Territory for the same purpose equal to the amount appropriated by the legislature of the State or Territory for this purpose; provided, that the additional appropriation to any State or Territory

shall not exceed an amount equal to 1 cent per capita of the total population of that State or Territory as shown by the last United States Census.

(3) This appropriation should be given specifically to the land-grant colleges and only to them.

(4) Requires each college to organize a "department" or "division" or "school" of extension work, i. e.—to organize the work as a definite part of the institution.

(5) Confines the work for the present to agriculture, domestic science, and other phases of rural life.

(6) Defines extension work broadly and yet closely. Defines agriculture and rural life so as to include instruction and aid in any phase of this field—in subjects technical and scientific, concerning business management, home making, sanitation; and economic, social, and moral subjects. Indicates that extension work is for adults and youth and children, and for people in towns and cities as well as in the open country.

(7) Extends the franking privilege to bona fide extension publications, and permits the use of the Federal appropriations for printing such publications.

(8) Also appropriates annually a substantial sum, perhaps $25,000 to $50,000, to the United States Department of Agriculture for investigation into and experimentation with methods of popular education in agriculture and rural life, in this country and abroad, for distributing the results of such investigations, and for making demonstrations thereof.

ADVANTAGES OF THE PLAN PROPOSED

(1) This plan would give the program for extension work immediate national significance.

(2) There would be no delay because of a failure of the legislature to act, and the work on at least a small scale could be started in each State.

(3) It provides sufficient money to put the poor, backward, or small State on a good footing with respect to the work.

(4) It enables the States to develop the work as rapidly as seems wise to them.

(5) It makes the United States Department of Agriculture a clearing house for methods of extension work, and keeps it in close touch with the work in all the States and Territories.

(6) It gives adequate breadth and scope to the whole scheme, and prevents States from leaving out important phases of the work.

(7) If later needs warrant, the per capita amount can be increased without other change in the law, and extension work in mechanic arts and in general culture subjects can be added by simple amendment.

(8) The amount of money immediately required is not large, and, in fact, when the act is in full operation will not draw heavily on either National or State Treasuries.

(9) It divides the responsibility between national and state governments and completes the circle of national aid for the land-grant colleges on principles already recognized in the two Morrill acts, in the Nelson Act, in the Hatch Act, and in the Adams Act.

(10) It recognizes and supports the great movement for making more fully available to the mass of working farmers the results of the research and experimentation of the stations established under and fostered by the Hatch and Adams Acts, and the organized teaching and inspiration of the agricultural colleges supported by the Morrill and Nelson Acts (*1*).

This report was referred to the section on college work which approved it, "with the understanding that only the general idea of a Federal appropriation was considered." The association then adopted the report.

To carry out its recommendations a bill was drafted under the leadership of President Butterfield, with the assistance of Professor Hamilton, of the Office of Experiment Stations. This bill was referred to the executive committee of the Association of American Agricultural Colleges and Experiment Stations, and in the form approved by them was given to J. C. McLaughlin, Member of

Congress from Michigan. In its final form this bill was introduced in the House of Representatives December 15, 1909, by Mr. McLaughlin, who was a member of the Committee on Agriculture, and was referred to that committee. It was entitled "A bill for increase of appropriation to agricultural colleges for extension work." It provided an annual appropriation of $10,000 to each State and Territory for the more complete endowment and maintenance of agricultural colleges established under the land-grant act of 1862 and related acts, "to be applied by these colleges in giving instruction and demonstrations in agriculture, home economics, and similar lines of activity to persons not resident in these colleges in the several communities, as may be provided by the States accepting the provisions of this act and in conveying and imparting to such persons information with reference to the improvement of rural life."

In addition, after two years any State or Territory which had accepted the previous appropriation and "actually organized a separate and distinct department of extension work in connection with and as a part of its agricultural college" would receive an amount equal to that appropriated for extension work by the State or Territory, provided that this additional appropriation shall not exceed 1 cent per capita of its population. All printed matter issued from the agricultural colleges for the furtherance of extension work was to be franked. The Federal funds thus appropriated were to be paid to the colleges quarterly upon the warrant of the Secretary of Agriculture, and reports, receipts, and expenditures of this fund were required to be made annually to that officer on schedules prescribed by him.

In a State or Territory having separate colleges for negroes the legislature might grant a just and equitable portion of this fund to one such college. Five per cent of each annual appropriation might be spent for the purchase, erection, preservation, or repair of buildings or the purchase or rental of land.

On January 5, 1910, a similar bill was introduced in the Senate by Jonathan P. Dolliver, of Iowa, and referred to the Committee on Agriculture and Forestry, of which he was chairman. At the request of the executive committee of the Association of American Agricultural Colleges and Experiment Stations hearings were held on both these bills February 24, 1910. At the hearing before the House committee (*180*) the executive committee was represented by its chairman, W. O. Thompson, president of Ohio State University; J. L. Snyder, president of the Michigan Agricultural College; and W. E. Stone, president of Purdue University, Indiana; and in the Senate (*181*) by C. F. Curtiss, dean of Iowa State College, and W. H. Jordan, director of the New York (Geneva) State Agricultural Experiment Station.

The arguments in support of the bill followed three general lines, (1) that the maintenance of the national food supply was presenting a serious problem of great importance to all our people; (2) that the movement of population away from the farm was increasing, partly because of the lack of educational and social advantages, and this movement tended to leave in the country the people who needed most the information and assistance which the extension services

of the land-grant colleges might give if their financial support were more adequate; and (3) the Federal Government through its system of indirect taxation was in a good position to aid the States in financing the extension work.

The committee on extension work of the association presented a memorandum through its chairman, K. L. Butterfield, in which the advantages of the McLaughlin bill were set forth. Among these were the following: (1) It would stir a nation-wide campaign for popular agricultural education; (2) it would give the people of small, poor, or backward States opportunity to get started in this work along with the people of the more progressive and wealthy States; (3) it would give the movement a certain measure of national direction; (4) it would leave the development of the work to the States; (5) it would include woman's work on the farm; (6) it would establish a central office in each State and bring the college and station close to the people; (7) it would relieve the experiment stations; (8) it would complete the circle of national aid to the agricultural colleges.

By this time the National Grange authorized its committee on legislation to work for Federal aid for agricultural extension, and the Farmers' National Congress expressed itself in favor of Federal appropriations to the land-grant colleges for this purpose, as well as for farm demonstration work among negroes in the South.

Meanwhile a strong movement was developing for vocational education in agriculture, trades, and industries, and home economics in secondary schools with Federal aid. The leading forces in this effort were the National Society for Industrial Education and the American Federation of Labor. It was also favored by a considerable number of the agricultural leaders in the land-grant colleges and elsewhere. The normal schools also were urging that they should have Federal aid, especially if they were to train teachers of vocational subjects.

As early as January 22, 1907, Charles R. Davis, of Minnesota, under the influence of Willet M. Hays, formerly professor of agronomy in the Minnesota College of Agriculture, and at that time Assistant Secretary of Agriculture, introduced in the House of Representatives a bill providing Federal aid for the teaching of agriculture, mechanic arts, and home economics in the secondary schools. This had the general support of President Roosevelt. It was also indorsed by the National Grange, Farmers' National Congress, and the Southern Educational Congress. It, however, encountered much opposition in agricultural and educational circles. Finally, after the American Federation of Labor had approved Federal aid for industrial education, its special committee on industrial education slightly revised this bill and gave it to Senator Dolliver, who introduced it in the Senate January 5, 1910, when it was referred to the Committee on Agriculture and Forestry. Some people, especially Professor Hays, thought that there would be a great advantage in combining the two Dolliver bills and making it possible to unite all the forces seeking Federal aid for extension, vocational education, and normal schools. A combined bill was therefore drafted, was finally approved by the Senate committee

as a substitute for the two Dolliver bills, and was reported favorably to the Senate June 22, 1910.

The committee report dealt chiefly with vocational education (*182*), thus indicating that aid to extension work was only an incidental matter in this bill. In the single paragraph relating to extension work, it was stated that the agricultural colleges believed that in no better way could the Federal Government cooperate with the States to bring the rapidly accumulating new knowledge into practical use on the farm and in the farm home.

This combined Dolliver bill appropriated annually $5,000,000 for instruction in trades and industries, home economics, and agriculture in public secondary schools; $4,000,000 for agriculture and home economics in State district agricultural schools; $1,000,000 for branch agricultural experiment stations; and $10,000 to each State and Territory for the maintenance, in each State college of agriculture and mechanic arts, "of an extension department devoted to giving instruction and demonstrations in agriculture, the trades and industries, home economics, and rural affairs to persons not resident at these colleges nor at the secondary and normal schools provided for in this act." Beginning with the second year after the passage of the act, additional amounts increasing yearly from $400,000 to $1,000,000, and then continuing annually at that amount, were to be allotted to the several States on the basis of agricultural population, provided that the State offset this with at least an equal amount. The State or Territory might, however, with the permission of the Secretary of the Interior, establish all or a part of this extension work in a State department of agriculture. The Office of Experiment Stations was to receive $20,000 a year. Extension publications were to be transmitted in the mails free of charge.

All the Federal funds were to be allotted on the warrant of the Secretary of the Interior, who should receive the financial reports on his blanks. He was charged with the administration of the law and was to be assisted by the Secretaries of Agriculture and Commerce and Labor.

Several national organizations favored the combined bill, including the American Federation of Labor, the Farmers' National Congress, and the normal department of the National Education Association. The National Grange wanted to be sure that the details of the bill would best promote the interests of the farmers, and their committee on education favored the teaching of agriculture in the local high schools rather than in separate agricultural schools. The National Society for Industrial Education, through its executive committee, announced that while it commended "the general spirit and purpose" of the bill, it had "grave doubts as to whether the bill as at present drawn will accomplish the purpose in view."

In the Association of American Agricultural Colleges and Experiment Stations at its meeting at Washington, November 16–18, 1910, there was a long discussion regarding this bill. Many members were not favorable to Federal aid to secondary schools or branch experiment stations. There was a general feeling that the association had not been fairly dealt with in putting the extension items into this bill without its consent. Finally its executive committee was in-

structed to press the passage of the McLaughlin extension bill at the next session of Congress.

Senator Dolliver had his combined bill put on the calendar of the Senate, but his death in October, 1910, prevented further action. On March 3, 1911, just before the close of the Sixty-first Congress, Senator Carroll S. Page, of Vermont, who was a member of the Committee on Agriculture and Forestry, introduced a slightly modified form of the Dolliver bill.

At the beginning of the Sixty-second Congress the increased popularity of agricultural extension or demonstration work was shown by the introduction of a large number and variety of bills granting Federal funds for such work.

On August 10, 1911, W. B. McKinley, of Illinois, introduced in the House an extension bill, which had been drafted by the Illinois State Bankers' Association and approved by the conference of bankers' committees on agricultural development and education. The McKinley bill appropriated annually to each State, for the more complete endowment of the land-grant colleges, "a sum equal to 1 mill for each acre of farm land in the respective State" for the fiscal year 1913, and an annual increase of this amount for nine years by an additional 1 mill per acre of farm land over the preceding year, and thereafter 10 mills on the same basis. This appropriation was to be used "for the support of well-distributed fields or farms for the demonstration of practical methods of soil improvement and preservation in economic systems of permanent agriculture, with suitable control or check plots with which to contrast the improved methods, and for the employment of demonstrators for the extension and practical demonstration among farmers and landowners of scientific methods of agriculture."

At the meeting of the Association of American Agricultural Colleges and Experiment Stations at Columbus, Ohio, November 15–17, 1911, the problem of further legislation in the interest of agriculture was discussed at considerable length. Dean Davenport, of Illinois, began the discussion. He pointed out that Federal endowment of agriculture had certain advantages, because (1) "it nationalizes a movement at once"; (2) it gains time in starting the movement in reluctant States and initiating activities that might long remain dormant in the best of States; (3) it tends to equalize conditions by taking money from prosperous sections to help build up the poorer sections; (4) it takes from all the people for the development of agriculture; and (5) indirect Federal taxation is less noticeable.

Among the things which the Federal Government might do were (1) to make endowment for the teaching of agriculture in public high schools and normal schools, (2) to make endowment for training teachers of agriculture for high schools and normal schools at State agricultural colleges, (3) to make appropriations for a limited amount of extension work by colleges "as a temporary measure until secondary education in agriculture can be fully established," and (4) to make appropriations on a graduated plan, based on acreage, after the manner of the McKinley bill, for traveling specialists to advise farmers, conduct demonstrations, and cooperate with farmers to build up rapidly a profitable and permanent agriculture. The unit of assignment should not be a county or district, but a definite

feature of farming. Dean Davenport objected to plans calling immediately for hundreds of trained workers; or sudden outlay of large amounts of money by the States; or an attempt to reach all farming people; or the appointment of traveling advisers by the Secretary of Agriculture, branch experiment stations, or separate agricultural schools. President Stone, of Purdue University, Ind., commended the Lever and McKinley bills and opposed the Page bill. Dean Hunt, of the Pennsylvania State College, held that while he would not oppose the extension bill, he favored a measure similar to the Page bill, providing broadly and fundamentally for the solution of the problems involved. W. M. Hays, Assistant Secretary of Agriculture, strongly favored the Page bill. P. P. Claxton, United States Commissioner of Education, favored a bill carrying liberal Federal appropriations for secondary education in agriculture, trades and industries, and home economics.

W. J. Spillman, Chief of the Office of Farm Management, presented a plan for regional, State, and district field agents, to be financed jointly by the Federal Government and the States, and B. T. Galloway, Chief of the Bureau of Plant Industry, briefly described the farm demonstrations carried on by that bureau.

On the basis of this discussion the executive committee brought in a series of resolutions covering the relations of the association to Federal legislation for vocational education and extension work. These resolutions were debated and adopted with some amendments. In substance, the association decided in favor of Federal aid for vocational education in public schools of secondary grade, but expressed its preference for the extension bill.

Among the resolutions adopted was one which had been presented by the committee on extension work and amended by the executive committee, which read as follows:

That, in view of the recent remarkable growth of interest in this work, and the need of nation-wide development of popular education in agriculture, we believe that congressional legislation granting aid to the states for this purpose is at the present time of pressing importance for American agriculture and the most approved method of reaching the masses of the people with the best ideals and practices of scientific agriculture (*1*).

At this meeting H. H. Gross, representing the National Soil Fertility League (*173*), briefly explained the work of that organization in promoting an extension bill in Congress. The league had been formed in the spring of 1911 by a group of bankers, railroad officials, and business men of the Middle West to promote the interests of agriculture. The league was strongly in favor of placing agricultural experts in the counties, and desired that these agents should work under the direction of the land-grant colleges. It was therefore engaged in an active campaign to bring about the passage of a Federal extension act which would extend the county-agent movement. It took the matter up with President Taft, and he indorsed Federal aid for extension work in a speech at Kansas City.

During 1911 the Page bill was again introduced in the Senate by Senator Page April 6, and similar bills were introduced in the House by W. B. Wilson, of Pennsylvania, and H. L. Godwin, of North Carolina, and on January 4, 1912, by C. C. Anderson, of Ohio.

The control of the House having passed to the Democratic Party, Asbury F. Lever, of South Carolina, a member of the Committee on

Agriculture and chairman of the Committee on Education, on June 12, 1911, introduced a bill, similar to the McLaughlin bill, for Federal aid to the agricultural extension work of the land-grant colleges. Mr. McLaughlin also reintroduced his extension bill December 9, 1911.

On December 14–16, 1911, a conference in Washington to consider the Page bill was attended by the executive committee of the agricultural college association, representatives of the American Federation of Labor, the National Grange, and the National Committee on Agricultural Education, and others.

In the fall of 1911 the executive committee of theAssociation of American Agricultural Colleges and Experiment Stations, officers of the National Soil Fertility League, and representatives of the Department of Agriculture prepared a modified form of the Lever extension bill. This was introduced in the Senate by Hoke Smith, of Georgia, on January 16, 1912, and the next day a similar bill was introduced in the House by Mr. Lever.

Regarding this form of his bill, Mr. Lever wrote to C. A. Shamel, editor of the Orange Judd Farmer, April 23, 1914, as follows:

> Permit me to say that the idea contained in this bill has been pending in Congress for many years in some form or other, that is, the idea of teaching agriculture and home economics by ocular demonstrations. The bill to which you refer was drawn in my office by President Thompson, Dean Russell, Dean Jordan, Dean Curtiss, and me. A draft of the bill was written, was submitted to Dr. A. C. True, in charge of the Office of Experiment Stations of the Department of Agriculture, in order that he might make the verbiage consistent with past legislation, and his suggestions were agreed upon and put into the bill (*174*).

Hearings on the Smith and Lever bills (*178*, *184*) were held at different dates between February 29 and March 5, 1912. Among those who took part in these hearings were President Thompson, chairman of the executive committee of the Association of American Agricultural Colleges and Experiment Stations; Oliver Wilson, master of the National Grange; H. H. Gross, president of the National Soil Fertility League; Joseph Chapman, jr., chairman of the committee on agricultural education of the American Bankers' Association; B. F. Harris, president of the Illinois Bankers' Association; the presidents of the agricultural colleges in Georgia, Massachusetts, New Hampshire, and Rhode Island, and the dean of Wisconsin College of Agriculture.

A letter, dated February 19, 1912, from James Wilson, Secretary of Agriculture, was read. This contained the following references to the proposals before Congress for Federal aid to vocational education:

> If the Congress cares to set out on this line of industrial training, it will be necessary to give attention to the education of teachers because very many times the number of teachers available will have to be trained and prepared for the wise expenditure of the proposed appropriation. It would seem to me to be much wiser to follow along the lines that have been succeeding so well in the Southern States. * * * If Congress cares to add to the very heavy and generous appropriation made for agricultural education in the past, I would have most hope of good coming from extension work and demonstrations made on the farms of the country under intelligent direction and practical instruction in the field given to the boys of the farm and practical instruction in the homes given to the girls of the farm.

In the House the chairman of the hearing stated that there were pending 16 bills for Federal aid to extension work.

The Lever bill was again changed somewhat and reintroduced April 4, 1912. It was amended and reported favorably from the Committee on Agriculture April 23, 1912. It was debated in the House August 12, 22, and 23, 1912, and passed with amendments August 23. The only important amendments were (1) a provision that this act should not interfere with the farmers' cooperative demonstration work and (2) that 75 per cent of the appropriation should be spent for actual demonstration work.

In the Senate, on August 24, it was referred to the Committee on Agriculture and Forestry, from which it was reported with amendments December 14, 1912. In the report (*176*) accompanying this bill, the committee cited a memorial from the agricultural college association, prepared as the result of its action at its meeting November 14, 1912. This requested the United States Senate to pass the agricultural extension bill (H. R. 22871) which had already passed the House. The attention of the Senate was called to two facts:

> First, the universal approval the country over of the wisdom of passing the land-grant act after an experience of 50 years; of the equally universal approval of the country of the act providing for the experiment stations after an experience of 25 years; and, second, to the fact that the agricultural interests as represented by farmers, the colleges, the experiment stations, the agricultural press, and other interests as represented in bankers' associations and philanthropic agencies of various names, are all united in a desire to see the bill for agricultural extension become a law.

In a memorandum prepared for the President of the United States, Secretary of Agriculture Wilson, referring to the Lever bill, said, "Unquestionably such a plan if properly carried out would result in great good and would do much toward making useful and valuable the rapidly growing store of knowledge along agricultural lines."

While this was under consideration in the Senate, Mr. Page offered as a substitute his bill which then had the form of a bill drafted by the secretary of the National Society for Industrial Education, but withdrew it for amendment, and resubmitted the modified bill January 24, 1913. This substitute was accepted by the Senate, after further amendment, January 29. The bill then went to conference between the two Houses with the result that the Sixty-second Congress expired without accepting either bill.

Three attitudes toward the pending measures for vocational education and extension work had by this time developed among organizations interested in these matters. Some favored the Smith-Lever bill, others wanted the Page bill, and some desired both vocational education and extension bills, with a preference for the latter if only one could be passed.

The campaign grew intense during the recess of Congress which followed its adjournment on August 26, 1912. The National Soil Fertility League circulated "a somewhat caustic criticism upon the Page bill from Dean Davenport," and claimed that 500 chambers of commerce and other organizations, 1,088 leading newspapers, and 7 of the largest banks were actively supporting the Smith-Lever bill.

The National Society for Industrial Education and the American Federation of Labor were strenuous in their efforts to obtain sup-

port for the Page bill. The Farmers' Union and the National Grange also supported this bill. The Association of American Agricultural Colleges and Experiment Stations at its meeting November 13 to 15, 1912, reaffirmed its "previous position toward Federal aid to vocational education and as to the immediate need of Federal legislation in aid of agricultural extension (*1*)." At the suggestion of Senator Hoke Smith a memorial on behalf of the association was sent to the Senate strongly urging the passage of the Lever bill.

On the first day of the second session of the Sixty-second Congress, Senator Smith presented indorsements of the extension bill, and a few days later Senator Page presented a memorial in favor of his bill from the National Society for Industrial Education. The Lever bill was reported to the Senate from the Committee on Agriculture and Forestry by Senator Smith, December 14, 1912, and was considered in the Senate, January 17, 1913. Senator Page then offered his bill as a substitute, whereupon Senator Smith suggested that the extension bill be passed first, and then a commission of about 25 men be appointed to perfect the details of a vocational education bill. This suggestion followed the terms of a letter from President Butterfield, of the Massachusetts Agricultural College, which had been put in the Congressional Record of January 2, 1912. He proposed a conference of educational experts to draft a vocational education bill. A compromise bill, presented by Senator Smith, was rejected, and on January 24, 1913, he made an argument against the Page bill, which he claimed the House would not accept. Senator Page persisted in pressing the substitution of his bill for the Lever bill, and finally, by a vote of 31 to 30, the substitution was made. The bill went to conference, but the session of Congress ended without agreement, and the bill died.

The election in 1912 gave the Democrats a majority in both Houses of Congress the following year. In the Senate Hoke Smith was retained on the Committee on Agriculture and Forestry and was chairman of the Committee on Education and Labor, and Senator Page was kept on both these committees. In the House, Mr. Lever was chairman of the Committee on Agriculture. Both the Smith-Lever extension bill and the Page bill were reintroduced in the Senate and referred to the Committee on Agriculture and Forestry. Senator Smith also introduced a bill to provide Federal funds for training vocational teachers in State universities, colleges, and normal schools, and a joint resolution to create a commission "to consider the need and report a plan, not later than December 1 next, for national aid to vocational education." It was not until January 20, 1914, that such a commission was created. The proposition to create it, which was actively supported by the National Society for Industrial Education and other friends of Federal aid for vocational education, had the effect of practically postponing further consideration of the Page bill, thus leaving the way open for the passage of the Smith-Lever extension bill.

By 1913 the farmers' cooperative demonstration work, under the direction of the United States Department of Agriculture, had assumed large proportions and become firmly established in all the Southern States. Similar work involving more cooperation with the agricultural colleges was spreading through the Northern and West-

ern States. Friends of these enterprises, and especially their leaders connected with the department, were apprehensive that the passage of the Smith-Lever bill as then drawn might seriously interfere with the progress of this work and might even cause its discontinuance. With national and State agencies for agricultural extension work operating more or less independently, considerable friction had already developed and might greatly increase if the funds for the State work were materially enlarged. This situation led to a conference in May, 1913, between the executive committee of the association of agricultural colleges and the Secretary of Agriculture, in which Senator Smith and Mr. Lever participated.

As a result a new form of the Smith-Lever extension bill was prepared, which was introduced in both Houses of Congress, September 6, 1913. Instead of simply providing for agricultural extension departments in the land-grant colleges, this bill was "to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an act of Congress of July 2, 1862, and of acts supplementary thereto, and the United States Department of Agriculture." It was expressly provided in this bill that—

> this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture, or his representative, and the State agricultural college or colleges receiving the benefits of this act. * * * Before the beginning of each fiscal year projects setting forth the proposed plan for work to be carried on under this act shall be submitted by the proper officials of each college and approved by the Secretary of Agriculture before the funds herein appropriated shall become available to such college for that fiscal year.

A director of cooperative agricultural extension work was to be appointed by the Secretary of Agriculture.

In the House, the Lever bill was referred to the Committee on Agriculture, which held a hearing (*177*) on it, September 23, 1913. Statements were made by Secretary of Agriculture David F. Houston; Assistant Secretary of Agriculture B. T. Galloway; A. E. Holder, representing the American Federation of Labor; W. O. Thompson, president of Ohio State University and chairman of the executive committee of the association of agricultural colleges; and E. H. Jenkins, director of the Connecticut Agricultural Experiment Station.

Doctor Galloway analyzed the new bill. The section in the former bill which granted the franking privilege had been omitted because it was understood that the farmers' cooperative demonstration work would be continued in cooperation with the colleges and the agents as Federal officers would have the frank. Provision for a director of cooperative extension work was desirable, because this would establish an office outside the bureaus which would act as a clearing house for the department and the State in matters relating to extension work. The requirement that 75 per cent of the Federal funds should be spent for "field instruction and demonstrations" had been omitted. Funds for the Territories had also been taken out. When asked whether the Federal extension fund could be used for farmers' institutes, Doctor Galloway replied that this was not expressly prohibited, but that the department could check such use of the fund.

Secretary Houston had been intimately associated with the educational work which the General Education Board was doing in the

South and desired that its cooperation in the farmers' cooperative demonstration work should be continued. He deemed it important that the Department of Agriculture and the agricultural colleges should work together in carefully formulating the plans for extension work. The Federal director of extension should not be attached to any bureau nor put under the director of the Office of Experiment Stations. The bill contemplated that each State would have an office for extension work. The State would suggest the plans of work. It was his hope that the extension work of the department would continue at least until the extension bill went into full operation. When it was suggested that the State departments of agriculture ought to have a portion of the Federal extension fund, and that an amendment to this effect might be introduced, Secretary Houston declared that it was the policy of the department to cooperate with the agricultural colleges in such matters, and that he favored the restriction of the work of the State departments to the field of administrative functions. Doctor Thompson stated that the association of agricultural colleges would approve this bill, including its cooperative features.

The bill was favorably reported (*176*) to the House December 8, 1913, with three amendments, of which the most important was the one omitting the provision for a director of cooperative agricultural extension work.

In reporting the bill (*179*), Mr. Lever stated that as Congress had adopted the policy of providing Federal funds for experimentation and higher education in agriculture, it should follow this up with funds for taking the information acquired by the State colleges and experiment stations and the Department of Agriculture to the people on the farms. "The system of demonstration or itinerant teaching presupposes the personal contact of the teacher with the person being taught, the participation of the pupil in the actual demonstration of the lesson being taught, and the success of the method proposed." For 10 years the demonstration work in the South had been successful. "The theory of this bill is to extend this system of itinerant teaching." The State is to measure the relative importance of the different lines of activity and to provide "at least one trained demonstrator or itinerant teacher for each agricultural county." The county agent "must give leadership and direction along all lines of rural activity—social, economic, and financial." Not only production, but also distribution, must be taught by the extension service. "One of the main features of this bill is that it is so flexible as to provide for the inauguration of a system of itinerant teaching for boys and girls." Special attention of the House is called to that feature of the bill which provides authority for itinerant teaching of home economics. With reference to the changes made in the original bill—

the principles involved are those of cooperation, the Federal Government aiding by advice and assistance in coordinating effort and the States performing the more important details of the local work. This bill places the responsibility for the actual conduct of the work proposed in the agricultural college and provides specifically for the adjustment of work to local conditions through a cooperative relationship established between the college of agriculture and the Secretary of Agriculture. There is thus avoided any possibility of developing a centralized and dominating agency, as is also avoided any possibility of

forcing upon the States types or kinds of work not readily adapted to the needs of the people (*179*).

The bill was debated and passed in the House January 19, 1914, with an amendment "that nothing in this act shall be construed to discontinue either the farm management work or the farmers' cooperative demonstration work now conducted by the Bureau of Plant Industry of the Department of Agriculture."

In the Senate the Smith extension bill was referred to the Committee on Agriculture and Forestry, September 6, 1913, and was reported back to the Senate, December 10, 1913 (*183*), by Senator Hoke Smith, who stated that modification of the bill "was made on account of the fact that the Department of Agriculture has already done excellent work in the line of farm demonstration." He also cited the memorandum prepared by Secretary Wilson for the President of the United States, with reference to the former Lever bill, which contains the following statement: "Unquestionably such a plan, if properly carried out, would result in great good and would do much toward making useful and valuable the rapidly growing store of knowledge developed along agricultural lines."

It was debated in the Senate January 18 and 28, 1914, and on the latter day the Lever bill received from the House was substituted for the Smith bill. The debate then continued from January 28 to February 7, 1914, when it passed the Senate with amendments. The House disagreed with the Senate amendments and the bill was sent to conference. The conference agreement was ratified by the House April 27, 1914, and by the Senate May 2, 1914. The bill was approved by President Wilson May 8, 1914. The principal amendments in the act, as compared with the bill which passed the House January 19, 1914, concern the additional amounts to be offset by the States, which were increased from $300,000 to $600,000 the first year and from $300,000 to $500,000 for seven instead of four years, making the final amount $4,100,000 instead of $3,000,000. A provision was also added which permitted "individual contributions from within the State," as a part of the State offset. The peculiar wording of this clause was intended to prevent contributions from large interstate corporations and in particular to exclude the General Education Board from participation in this enterprise.

In the discussion of the bill the principle of cooperation was at first strongly opposed on the ground that it would probably result in control of the work by the department. In the Senate at one time an amendment was offered to strike the cooperative feature from the bill.

The method of distributing the Federal funds to be offset by the States was attacked. Senator Cummins, of Iowa, urged that the allotment should be made on the basis of the number of acres of improved land in farms. This would have increased the amounts for Iowa and neighboring States and decreased them for the Southern States. As an alternative he proposed the number of people engaged in agricultural pursuits. The friends of the method in the bill replied that the work was educational and therefore the number of people to be reached was the proper basis for allotment of funds. This view prevailed.

An attempt was also made to have the bill provide specifically for extension work for negroes as was done in the Morrill Act of 1890 for Federal aid to the land-grant colleges. But it was pointed out that white extension agents were doing, and would doubtless continue to do, considerable work which benefited the negro farmers, and that it was doubtful whether the negro colleges receiving Federal funds under the act of 1890 were in a position to do effective extension work in agriculture and home economics. Moreover, there was a feeling that it would not be wise to divide the responsibility for the use of extension funds in a State, as this might result in dissimilar instruction being given to white and negro farmers and in conflict between the races in the administration of the extension act. Amendments providing that the work should be carried on without race discrimination and that, in a State having two or more land-grant colleges, the Government and the Secretary of Agriculture should determine which of these institutions should receive the extension funds, were adopted in the Senate but were stricken out in the conference. It was finally left to the legislature of each State to determine which college or colleges therein should administer the fund given to the State under this act.

The Smith-Lever Cooperative Extension Act provides—

> that in order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same, there may be inaugurated in connection with the college or colleges in each State now receiving, or which may hereafter receive the benefits of the land-grant act of 1862 and the Morrill college endowment act of 1890, agricultural extension work which shall be carried on in cooperation with the United States Department of Agriculture. * * *
>
> That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this act.

Each State is to receive $10,000 of Federal funds annually, and additional amounts on the basis of its rural population, from a fund of $600,000 at first, increasing by $500,000 annually for seven years and thereafter continuing at a total of $4,100,000. These additional amounts of Federal funds must be offset by appropriations by the State legislature or by contributions "provided by State, county, college, local authority, or individual contributions from within the State."

Before the Federal funds granted under this act—

> shall become available to any college for any fiscal year, plans for the work to be carried on under this act shall be submitted by the proper officials of each college and approved by the Secretary of Agriculture. * * *
>
> No portion of said moneys shall be applied, directly or indirectly, to the purchase, erection, preservation, or repair of any building or buildings, or the purchase or rental of land, or in college-course teaching, lectures in colleges, promoting agricultural trains, or any other purpose not specified in this act, and not more than 5 per cent of each annual appropriation shall be applied to the printing and distribution of publications.

Each college receiving the benefits of the act must annually make a detailed report of receipts, expenditures, and operations to the

governor of the State, and copies of this report must be sent to the Secretary of Agriculture and the Secretary of the Treasury. The administration of the act is committed to the Secretary of Agriculture, who is required to report annually to Congress "the receipts, expenditures, and results of the cooperative agricultural extension work in all of the States receiving the benefits of the act."

This act established a broad national system of popular and practical education in agriculture and home economics, which may be carried on through the various agencies and methods used by the Department of Agriculture and the agricultural colleges when the act was passed, or in new ways which may be devised to meet future conditions of agriculture and country life.

It carries further than any previous legislation a requirement for active cooperation of Federal and State agencies in the planning and conduct of work maintained with Federal and State funds. It also contemplates the extension of this cooperation to take in counties, communities, and individuals. At the same time it safeguards the use of the Federal funds by conferring on the Secretary of Agriculture comprehensive administrative authority.

FIRST YEAR'S WORK UNDER THE SMITH-LEVER ACT

When the Smith-Lever Extension Act passed, work of the kinds contemplated in this act was being conducted by several agencies, (1) the United States Department of Agriculture, (2) State departments of agriculture, (3) State agricultural colleges, and (4) county farm bureaus or similar organizations, with or without public funds. The State and local organizations were varied as regards the laws, regulations, and relationships pertaining to their work. Funds were derived from different sources, public and private. The Smith-Lever Act was peculiar in its administrative features, its broad authorization of work, and its definite prohibitions. While there was already considerable cooperation between the United States Department of Agriculture and county extension agencies, there were no well-defined policies for such cooperation, and there were large areas of operation and of organization in which it was functioning imperfectly, if at all.

As is always the case with new statutes drawn for the most part in broad general terms, there were many problems of administration to be solved in putting the Smith-Lever Act into full operation. While the Secretary of Agriculture was responsible for the administration of the act and would determine the policy of the department regarding this important matter, it was clear that the details of administration would necessarily be left largely to subordinate officials within the department. Since the operation of this law would affect all the different bureaus of the department, it was desirable that the organization dealing with this act should be independent of bureau control and directly responsible to the Secretary of Agriculture.

During the first year of his administration Secretary Houston was greatly impressed with the need of reorganization of the Department of Agriculture to meet the requirements of its great and rapidly expanding research, extension, and regulatory work. In the appropriation act for the department for the fiscal year beginning July 1, 1914, Congress gave the Secretary of Agriculture, in accordance with

his suggestion, authority "to prepare a plan for reorganizing, redirecting, and systematizing the work of the Department of Agriculture as the interests of economical and efficient administration may require," and ordered that such a plan should be submitted to Congress with the estimates for appropriations for the succeeding year. This plan was prepared with the aid of a committee drawn from various bureaus. It was decided to recommend the retention of the existing bureau organizations, but to differentiate within the bureaus, as far as practicable, the research, extension, and regulatory personnel and work, and to relocate certain important lines of work. Congress accepted this proposition, and the appropriation for the year beginning July 1, 1915, was made on this basis.

Three agencies in the department had dealt with extension work in a large way, (1) the Office of Experiment Stations, through its promotion of the general interests of the farmers' institutes and its studies and reports on the extension work of the State agricultural colleges and in foreign countries, (2) the Office of Farmers' Cooperative Demonstration Work, through its control and management of that work in the Southern States, and (3) the Office of Farm Management, through its cooperation with agricultural colleges and other State and county organizations, particularly in those phases of extension work which were based on economic studies and demonstrations. The Office of Experiment Stations had also cooperated closely with the Association of American Agricultural Colleges and Experiment Stations in broad studies of the organization of instruction and research in agriculture, and had had extensive experience over a long period of time in the administration of the Federal laws relating to the experiment stations (the Hatch and Adams Acts).

After the passage of the Lever extension bill by the House the executive committee of the agricultural college association, during a meeting in Washington, February 28 and 29, 1914, conferred with the Secretary and Assistant Secretary of Agriculture regarding the organization and administration of work under this measure (*186*). This led to a statement by Assistant Secretary Galloway to the chairman of the committee, March 5, 1914, regarding what would be required to put this measure in operation, and the view of the department as to the use of the extension funds. This statement included the following summary:

(1) When the Smith-Lever bill becomes a law, each State must give its assent to its provisions and designate the college or colleges which are to receive its benefits. A treasurer must be designated to receive and disburse the funds granted under this measure and he must be certified to the Secretary of the Treasury.

(2) Each college must submit to the Secretary of Agriculture a series of projects covering the $10,000 appropriated in the Smith-Lever bill for the fiscal year beginning July 1, 1914.

(3) An Office of Extension Work will be created in the Department of Agriculture for carrying on the business connected with the administration of the Smith-Lever fund and for coordinating this new work with the extension work already undertaken by the department under existing legislation.

(4) The farm demonstration work in the South and the county advisory work in the North, now conducted under the Bureau of Plant Industry, will be continued but will be transferred to the Office of Extension Work.

(5) A States Relations Service will be created and this will include the present Office of Experiment Stations (exclusive of the drainage, irrigation, and nutrition investigations), and the new Office of Extension Work.

(6) Each college should create an extension division and put at its head an administrative leader or director who will have charge of all the agricultural extension work in the State.

(7) The department funds used for extension work in the several States and the Smith-Lever funds should be administered separately, though the work supported by both funds is under the same extension director.

(8) The work under the Smith-Lever bill must consist of "instruction and practical demonstrations in agriculture and home economics," and the "imparting" of "information on said subjects through field demonstrations, publications, and otherwise", and shall not include "college-course teaching, lectures in colleges, promoting agricultural trains."

(9) It is expected that approximately 75 per cent of the Smith-Lever fund will be spent for field demonstrations and the practical instruction immediately connected therewith. Twenty-five per cent may be spent in conducting such enterprises as movable schools, study clubs, or boys' and girls' clubs, and in the preparation, printing, and distribution of popular publications, though it is expressly provided that "not more than 5 per cent of each annual appropriation shall be applied to the printing and distribution of publications."

(10) Only such meetings of farmers and other persons should be considered as coming within the provisions of the Smith-Lever bill as are held directly under the supervision of the extension divisions of the colleges receiving the benefits of this act and are included in the projects for the extension work of the colleges approved by the Secretary of Agriculture. Farmers' institutes should continue to be maintained with State funds and not be included in the program of work under the Smith-Lever bill.

(11) Expenses for the establishment and maintenance of permanent "model" or demonstration farms will not be considered proper charges against the Smith-Lever fund.

(12) When the Smith-Lever bill becomes a law, the Secretary of Agriculture will issue definite instructions regarding the duties of States and colleges under the law and will pass upon the details involved in its construction and administration from time to time as the necessity arises.

It was also announced at this time that "in the proposed general reorganization of the department, it is planned to create a States Relations Service, which will have general supervision of the department's business relating to the agricultural colleges and experiment stations and to put Dr. A. C. True at its head."

Questions having arisen concerning the relations of the department with the States regarding the demonstration or other extension work conducted with its own funds and the work financed wholly with State funds, the desirable policy for the department to pursue in these matters was set forth in a memorandum from the director of the Office of Experiment Stations to the Assistant Secretary of Agriculture, May 6, 1914, as follows:

With regard to the funds at the disposal of the State over and above what is required to meet the conditions of the Smith-Lever bill, the expenditure of such funds is to be determined wholly by the State authority, except as far as they may enter into cooperative agreements with the department governing the use of such funds. It would seem proper, however, that whatever extension work is undertaken with such funds should be coordinated or articulated with the other extension work, financed from Federal funds or financed jointly from Federal funds and State funds.

In case the department has funds for extension work within the States, the department desires that there shall be in each State, connected with the agricultural college, an extension division with a responsible leader, who, while selected by the State, will be satisfactory to the Secretary of Agriculture; that this leader shall be held directly responsible for all extension work in agriculture and home economics within the State whether it be financed directly from Federal funds or whether it be financed from funds appropriated through the Smith-Lever bill or from funds derived from sources within the State. All such extension work shall be directed within the State by the State extension leader and all instructions that his subordinates may receive shall be

given by him or through him. Whenever the department has cooperative agreements with the State college, involving the employment of agents with department funds and the granting of the franking privilege to such agents, they shall be the joint representatives of the college and the department for the work contemplated in the agreements.

To put this general policy into effect it is desirable to have a memorandum of understanding between the department and the State college as a basis for project agreements regarding the various lines of work in which the department and the colleges may cooperate from time to time (*193*).

With respect to State funds offered as offset for Federal funds appropriated under the Smith-Lever Act, the solicitor of the department ruled May 22, 1914, that—

It is the duty of the Secretary of Agriculture to ascertain whether any plans which may be submitted by the officials of any college involve expenditures for any object or purpose prohibited by the act, and if such is the fact, to disapprove the plans, whether it is contemplated that the expenditures shall be paid out of the moneys appropriated by the act, or out of moneys provided by the States for carrying out its purpose (*194*).

After the passage of the act the executive committee of the Association of American Agricultural Colleges and Experiment Stations again conferred with the officers of the department charged with the administration of the act, and reached an agreement on the lines of the general policy cited above. Particularly the proposition for a "memorandum of understanding" between the department and each State was indorsed.

A tentative draft of such a memorandum was prepared by the director of the Office of Experiment Stations and presented for criticism to some representatives of the agricultural colleges. In its final form it was approved by the Secretary of Agriculture and the executive committee of the agricultural college association.

Since this memorandum has been the basis on which the extension work of the agricultural colleges and the department has since been conducted, it is reproduced in full here:

MEMORANDUM OF UNDERSTANDING BETWEEN THE [IOWA] STATE AGRICULTURAL COLLEGE AND THE UNITED STATES DEPARTMENT OF AGRICULTURE REGARDING EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS IN THE STATE OF [IOWA].

Whereas, [Iowa] State Agricultural College has, or may hereafter have, under its control Federal and State funds for extension work in agriculture and home economics, which are and may be supplemented by funds contributed for similar purposes by counties and other organizations and by individuals within said State, and the United States Department of Agriculture has, or may hereafter have, funds appropriated directly to it by Congress which can be spent for demonstration and other forms of extension work in the State of [Iowa].

Therefore, with a view to securing economy and efficiency in the conduct of extension work in the State of [Iowa], the president of the [Iowa] State Agricultural College, acting subject to the approval of the board of trustees of said college, and the Secretary of Agriculture of the United States, hereby make the following memorandum of understanding with reference to cooperative relations between said college and the United States Department of Agriculture for the organization and conduct of extension work in agriculture and home economics in the State of [Iowa].

I. The [Iowa] State Agricultural College agrees:

(a) To organize and maintain a definite and distinct administrative division for the management and conduct of extension work in agriculture and home economics, with a responsible leader selected by the college and satisfactory to the Department of Agriculture;

(b) To administer through such extension division thus organized any and all funds it has or may hereafter receive for such work from appropriations made by Congress or the State legislature, by allotment from its board of trustees, or from any other source;

(c) To cooperate with the United States Department of Agriculture in all extension work in agriculture and home economics which said department is or shall be authorized by Congress to conduct in the State of [Iowa].

II. The United States Department of Agriculture agrees:

(a) To establish and maintain in the Department of Agriculture a States Relations Committee, pending the authorization by Congress of a States Relations Service, which shall represent the department in the general supervision of all cooperative extension work in agriculture and home economics in which the department shall participate in the State of [Iowa] and shall have charge of the department's business connected with the administration of all funds provided to the States under the Smith-Lever Act;

(b) To conduct in cooperation with [Iowa] State Agricultural College all demonstrations and other forms of extension work in agriculture and home economics which the department is authorized by Congress to conduct in the State of [Iowa].

III. The [Iowa] State Agricultural College and the United States Department of Agriculture mutually agree:

(a) That, subject to the approval of the president of [Iowa] State Agricultural College and the Secretary of Agriculture, or their duly appointed representatives, the cooperative extension work in agriculture and home economics in the State of [Iowa] involving the use of direct Congressional appropriations to the Department of Agriculture shall be planned under the joint supervision of the director of extension work of [Iowa] State Agricultural College and the agriculturist in charge of demonstration work of the United States Department of Agriculture in the [North and West] and that the approved plans for such cooperative extension work in the State of [Iowa] shall be executed through the extension division of [Iowa] State Agricultural College in accordance with the terms of the individual project agreements;

(b) That all agents appointed for cooperative extension work in agriculture and home economics in the State of [Iowa] under this memorandum and subsequent project agreements, involving the use of direct congressional appropriations to the Department of Agriculture, shall be joint representatives of the [Iowa] State Agricultural College and the United States Department of Agriculture, unless otherwise expressly provided in the project agreements; and the cooperation shall be plainly set forth in all publications or other printed matter issued and used in connection with said cooperative extension work by either [Iawo] State Agricultural College and the United States Department of Agriculture;

(c) That the plans for the use of the Smith-Lever fund, except so far as this fund is employed in cooperative projects involving the use of department funds, shall be made by the extension division of the [Iowa] State Agricultural College but shall be subject to the approval of the Secretary of Agriculture in accordance with the terms of the Smith-Lever Act, and when so approved shall be executed by the extension division of said [Iowa] State Agricultural College;

(d) That the headquarters of the State organization contemplated in this memorandum shall be at [Iowa] State Agricultural College.

IV. This memorandum shall take effect when it is approved by the president of [Iowa] State Agricultural College and the Secretary of Agriculture of the United States and shall remain in force until it is expressly abrogated in writing by either one of the signers or his successor in office.

Date ____________________ ____________________________________
Pres. [Iowa] State Agricultural College.

Date ____________________ ____________________________________
Secretary of Agriculture.

This memorandum was sent to the land-grant institutions receiving the benefits of the Smith-Lever Act. The presidents of these institutions in 46 States joined with the Secretary of Agriculture in signing the memorandum. The University of California and the University of Arizona declined to accept the memorandum. The latter afterwards accepted it, but the University of Illinois later withdrew

its acceptance. Objection to the memorandum was based on the ground that it interfered with the authority of the trustees of these institutions respecting the appointment and duties of extension officers. However, the general principles set forth in the memorandum were followed in the arrangements for the organization and conduct of extension work under the Smith-Lever Act in all the States.

Pending enactment by Congress of legislation authorizing the reorganization of the department, Secretary Houston appointed a committee on States relations (*188*) to deal with matters growing out of the Smith-Lever Act. This committee was composed of A. C. True, director, and E. W. Allen, assistant director of the Office of Experiment Stations, Bradford Knapp, special agent in charge of farmers' cooperative demonstration work in the South, and C. B. Smith, special agent in charge of farmers' cooperative demonstration work in the North and West. This committee functioned until July 1, 1915.

The formal order establishing this committee was issued June 15, 1914.

This committee will take under consideration matters relating to all the extension work carried on by the several bureaus and offices of the department, and those connected with the administration of the Smith-Lever Extension Act. All plans for demonstration and extension work originating in any bureau or in any State should be first submitted to the States Relations Committee, which will make recommendations regarding them to the Assistant Secretary. Approved plans for demonstration and extension work by any bureau should not be put into operation in any State until they have been brought to the attention of the chairman of the States Relations Committee and an opportunity has been given for arranging with the extension directors of the agricultural colleges regarding the execution of these plans in the States concerned.

Correspondence and personal inquiries regarding the extension work of the State agricultural colleges which come to the offices of the Secretary and Assistant Secretary [of Agriculture] will be referred to the chairman of the States Relations Committee, under whose supervision replies will be prepared and given out, except that questions involving the policy of the department, legal and administrative rulings, and approval of plans of work and expenditures shall be referred back to the Secretary's office and the replies shall be given out from that office.

Within the States Relations Committee, extension business with the agricultural colleges in the States of Virginia, West Virginia, Maryland, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida, Louisiana, Arkansas, Oklahoma, and Texas shall be conducted through the office of farmers' cooperative demonstration work, in charge of Bradford Knapp, and such business with the agricultural colleges in the remaining States shall be conducted through the office of farm demonstrations in charge of C. B. Smith, in accordance with general regulations recommended by the States Relation Committee and approved by the Assistant Secretary (*188*).

All the States assented to the provisions of the Smith-Lever Extension Act through the legislature or governor, and designated one land-grant institution to receive the benefits of the act, thus insuring unity of administration of the extension work within the State. Each institution designated an officer to have charge of the cooperative agricultural extension work within the State. This officer was usually given the title of director, but in a number of States he was the person who was also dean of the agricultural college or director of the experiment station. In matters relating to extension work in the States, it was the policy of the department to deal with the director, except so far as he might designate other persons with whom certain business might be transacted. The extension directors were asked to present their plans of work under this act in the form of

definite and limited projects, and this was done in all cases. When projects covering the $10,000 appropriated to the State the first year under the Smith-Lever Act were approved by the Secretary of Agriculture or his representative, he certified to the Secretary of the Treasury that that State was entitled to receive this fund.

Under the agricultural appropriation act approved June 30, 1914, the Department of Agriculture had $400,000 for farmers' cooperative demonstration work outside the Cotton Belt; that is, in the 33 Northern and Western States; and for farmers' cooperative demonstrations and for the study and demonstration of the best methods of meeting the ravages of the cotton boll weevil, $673,240, which was to be used in the 15 Southern States. The appropriation for the South had been increased from $375,000 in order to provide Federal funds which would be substituted for the money furnished by the General Education Board. From these two items for demonstration work, the funds required for the maintenance of the two extension offices at Washington had to be taken, leaving about $900,000 to be spent in the States. It was presumed that the demonstration work would be carried on in cooperation with the land-grant colleges. To emphasize the desirability of such cooperation and to make sure that the county-agent system would be continued, it was provided in the item for the southern work "that the expense of this service shall be defrayed from this appropriation and such cooperative funds as may be voluntarily contributed by State, county, and municipal agencies, associations of farmers and individual farmers, universities, colleges, boards of trade, chambers of commerce, other local associations of business men, business organizations, and individuals with the State." Several of the department bureaus also had funds which might be used for extension work.

In the items for the Office of Experiment Stations, the Secretary of Agriculture was given authority to use funds appropriated to that office for the administration of the Smith-Lever Extension Act, prescribe the form of annual financial statement required by that act, ascertain whether expenditures are in accordance with the provisions of the act, and report to Congress.

It was also provided that all correspondence, bulletins, and reports "for the furtherance of the purposes" of that act "may be transmitted in the mails of the United States free of charge for postage," under regulations of the Postmaster General, "by such college officer or other person connected with the extension department of such college as the Secretary of Agriculture may designate to the Postmaster General." A later ruling of the Post Office Department was that the paragraph relating to the franking privilege was permanent legislation, and it has been in force ever since. The extension director in each State was designated by the Secretary of Agriculture as the person to receive this franking privilege.

The department decided to confine the use of the farmers' cooperative demonstration fund allotted to the States to the payment of part of the salaries and expenses of the State and district leaders of the county agricultural and home demonstration agents and leaders of boys' and girls' club work. In the Southern States the colleges agreed to take over approximately the whole force of leaders and county agents who had been employed with department and General Education Board funds. In the Northern and Western

States the State and county agents, employed with department funds in the farm-management demonstration work, became more fully a part of the extension forces of the State colleges.

In this way, throughout the country the demonstration work was continued without interruption, and a unified system of cooperative extension work in agriculture and home economics was established in all the States. With the aid of the Smith-Lever fund and State funds the colleges continued and somewhat enlarged their forces of extension specialists in the various branches of agriculture and home economics. The department decided not to accept under the Smith-Lever Act projects for farmers' institutes, short courses at the colleges, or correspondence courses. These enterprises were, however, continued with State funds as a part of the extension work of the colleges in a number of States.

The department bureaus having extension funds entered to a considerable extent into cooperative arrangements with the colleges for the use of their funds on particular projects. They had, however, been so long accustomed to working independently in the States, or to cooperating with various agencies, that it was difficult for them to adjust their practice to the new conditions arising from the Smith-Lever Act and the memorandum of understanding. There were, therefore, cases in which independent action was continued on the ground either that the language of the appropriation act justified such action, or that particular enterprises were not strictly extension work as defined in the Smith-Lever Act.

Where extension agents received any part of their salary from department funds it was necessary for them to have Federal commissions, under which they became subject to the administrative regulations of the Federal civil service, though they were excepted from appointment through competitive examination. In this way they were entitled to the franking privilege for official business. To receive payment of salary or expenses they were required to make weekly reports of their work, as well as annual reports, to the department.

As a result of the peculiar status of such agents and the previous exclusive attachment of many of them to the department, it was difficult for them at first to realize fully their new relations to the colleges, and it took considerable time to overcome their tendency to deal directly with the department officers at Washington.

Financial schedules for use in accounting and reports of expenditure of funds were drafted by the States Relations Committee and when approved by the Secretary of Agriculture were sent to the colleges. These required a statement of receipts and expenditures of the Smith-Lever funds and requested a similar statement for other funds used by the college for extension work in agriculture and home economics. This schedule provided for a summary of expenditures classified under two general heads, (1) ordinary business lines and (2) projects. The items in the former classification were salaries, labor, publications, stationery and small printing, postage, telegraph, telephone, freight and express, heat, light, water and power, supplies, library, scientific apparatus and specimens, livestock, travel, contingent expenses, and unexpended balance. Members of the extension offices inspected the books and vouchers at the colleges

at least once a year and correlated these accounts with the reports of the extension agents on their work. Advantage was also taken of these visits to the States to confer with extension officers and sometimes to go into a few counties to see what the agents located there were doing. Conferences of the State leaders and county agents with Federal officers were sometimes held at the college. The procedure adopted for reports, accounting, and visitation enabled the Washington offices to keep in touch with the progress of the work throughout the country, to use their influence for its best development, and to support its claims for continued and increased Federal aid before the Secretary of Agriculture and committees in Congress.

At the meeting of the Association of American Agricultural Colleges and Experiment Stations at Washington, D. C., November 11 to 13, 1914, there was much discussion of extension work. In his address of welcome Secretary Houston referred to the cooperation in extension work which had been brought about between the colleges and the department and said that it seemed to him that "this is a most satisfactory outcome. We want to have just as few agencies as possible doing this particular kind of work in any community. The work is all of a kind, and in the aggregate represents the largest and, in my judgment, in many respects the most significant piece of educational work that any nation has ever undertaken" (*1*).

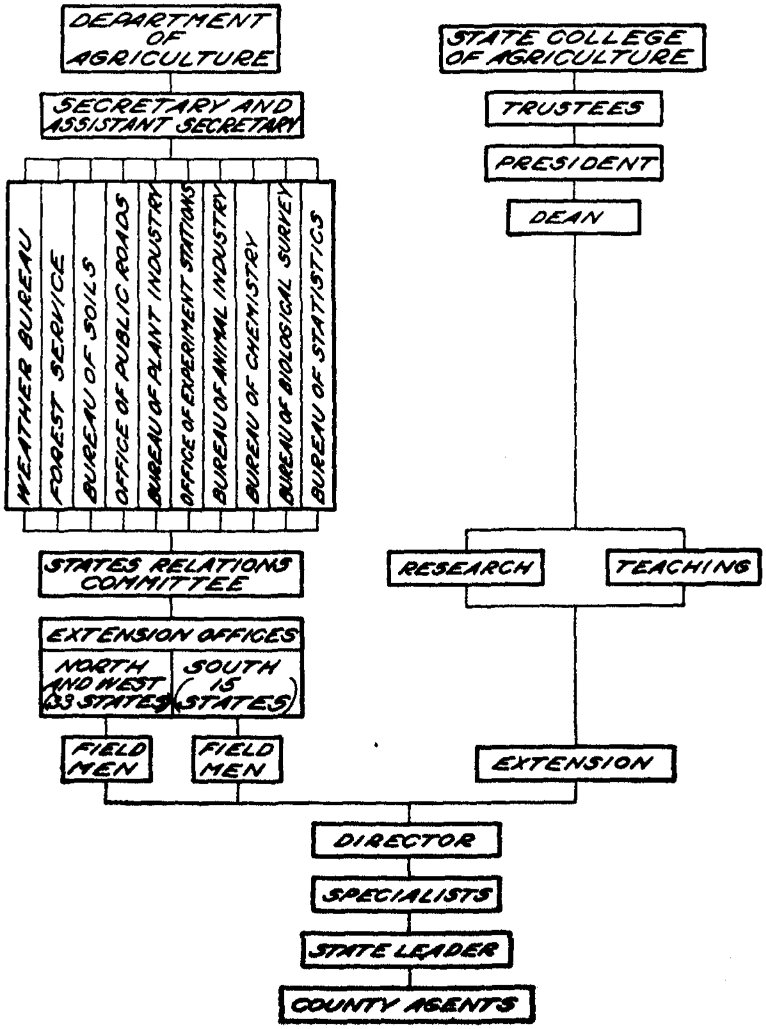
The president of the association that year was the chairman of the States Relations Committee of the Department of Agriculture. In his presidential address he dwelt at considerable length on the system of extension work contemplated by the Smith-Lever Act and its relation to the resident teaching and research of the agricultural colleges. After stating that the plan of organization of the extension work contemplated the appointment of county agents, he said:

Carried to its logical conclusion this means that the colleges and department will before long have a definite existence as educating agencies in practically every county of the United States. Through organization of the farm men and women into small groups they may ultimately have classes in agriculture and home economics in every school district. This is an educational organization radically different from that followed in the public-school system of the United States where local initiation and control have largely obtained, State supervision has been very largely of a general character, and Federal supervision has been entirely lacking. The agricultural college is to be changed from an institution having a strictly local habitat with comparatively limited powers for the diffusion of knowledge to a widely diffused institution dealing educationally with multitudes of people at their own homes. And it is to carry with it wherever it goes the National Department of Agriculture not only as a provider of funds but as an active coadjutor in its educational operations. And this education is to be not merely the giving out of information to be absorbed by the students, but rather the training involved in active participation in the demonstration and discussion of practical affairs, which will constitute a large share of the extension instruction. Moreover this instruction will deal with matters which are of vital and immediate importance to the students since they will affect their incomes, daily practices, and community interests.

The character of the atmosphere and work of every educational institution is powerfully affected by the character and aims of its students. There is therefore no doubt that the reaction of the great masses of extension students on the agricultural colleges and the department will be a very important factor in their future development (*1*).

One session of this meeting was given up to the discussion of the administration of the Smith-Lever Act. President Thompson, of Ohio State University, speaking for the executive committee, congratulated the association on the part it had taken in helping to obtain the passage of this act and on the spirit of cooperation which the colleges and the department had shown with reference to the "memorandum of understanding" and other plans for the administration of the act.

As chairman of the States Relations Committee, designated by the Secretary of Agriculture to represent the department in this discussion, the writer explained the plans thus far made by the department and the colleges for the administration of the act and illustrated the contemplated organization of the extension work with the following diagram (*1*):



In this administrative arrangement on the part of the college, the department feels that the most important single factor is the actual active manager of the extension service in the college. He may be called by any name that seems best to the institution; but there should be in every institution an active manager of the extension division, with sufficient authority to conduct all the ordinary business of the division in the management of the extension force, in the expenditures and accounting for the funds of the division, and in relations with the Department of Agriculture, in the same way that the station director does. We feel that unless this man can devote all his time to this administrative work we are not likely to get the best results.

* * * * * * *

In the larger States, as the Smith-Lever fund and other funds grow, there will be a large force to administer, and unless you have some officer who is able to deal intimately and constantly with that force at the college and in the field, you are not likely to get the best results. When you add to that the somewhat complicated cooperative arrangements which the extension division will naturally, and under the present scheme necessarily, have with the Department of Agriculture, you certainly have for that officer administrative business of a very important kind to take the full time and energy of a very able man (*1*).

Dean C. F. Curtiss, of Iowa, and President A. M. Soule, of Georgia, spoke favorably of the "memorandum of understanding," and the latter emphasized the importance of differentiation in organization of research, resident teaching, and extension work, commended the project system, pointed out the ultimate responsibility of the college president for the administration of the extension service, and favored a separate extension director with State leaders, extension specialists, and county agents.

Director A. D. Wilson, of Minnesota, emphasized the importance of conferences between representatives of the States and the department. B. I. Wheeler, president of the University of California, dwelt on the importance of the county agent (called, in California, farm adviser).

In a paper on "The problem of placing county agents in effective touch with farmers," C. B. Smith cited the experience and suggestions of a number of such agents and summarized his conclusions as follows:

(1) Work through organizations.
(2) Deal with individuals, but deal with them primarily only as they represent groups of farmers.
(3) Know what the agriculture of the county is from first-hand sources and, based on such information, undertake demonstrations, supplemented by propaganda work, by lectures and the press.
(4) Write and talk with the facts of local agriculture arranged in such a convincing way as to induce action.
(5) Utilize the public-school system and work with boys and girls. Through them you also reach the hearts of fathers and mothers, the field and the home.
(6) Utilize the automobile excursion, the college excursion, the county picnic, the farmers' meetings, the county fairs, etc., for social purposes, demonstrations, educational exhibits and instructions.
(7) Get behind and push every helpful agricultural movement in the county.
(8) Put in a county agent who knows agriculture technically and practically, whose heart is in his work, and whose highest delight is in rendering service (*1*).

Director C. R. Titlow, of West Virginia, spoke on "Correlating the extension work of the colleges with other agencies in the State" and advocated the formation of county councils including representatives of the federation of churches, Young Men's Christian Associa-

tion, Young Women's Christian Association, federations of women's clubs, granges, farmers' unions, school superintendents, boards of health, farm bureaus, and kindred organizations.

The committee on extension organization and policy defined a number of terms used in connection with extension work. Among these definitions were the following:

Extension work: The extension work of an educational institution embraces all of its activities for the instruction of people who are not resident at the institution. For administrative purposes persons who are pursuing courses given at the institution covering not more than two weeks of time are regarded as not resident.

Boys' and girls' clubs: Boys' and girls' clubs are organizations of young people for the carrying on of systematic practical study and demonstrations in the field and home. The age of members should be 10 to 18 years inclusive. In the administration of boys' and girls' club work profitable use may be made of individual or club contests in connection with the various club activities. Your committee feels, however, that the emphasis should be placed on the study and demonstration work rather than on the competitive features.

Demonstrations. A demonstration is an effort designed to show by example the practical application of established principles or facts (*1*).

The committee favored the use of the title "county extension representative," instead of county agent, demonstrator, or adviser.

The report to Congress on the cooperative extension work in agriculture and home economics for the year ended June 30, 1915, included a statement of the history, progress, and results of this work in each State (*201*).

The Smith-Lever fund was spent largely on the projects for administration, publications, county agents, home economics, and boys' clubs. The remainder was used in small amounts for work in animal husbandry, poultry, dairying, animal diseases, agronomy, horticulture, plant pathology, entomology, agricultural engineering, rural organization, marketing, exhibits, fairs, and work by miscellaneous specialists. Other extension funds were distributed among these projects, to which were added those in forestry, farm management, farmers' institutes, correspondence courses, and agriculture in schools.

Of the $480,000 appropriated under the provisions of the Smith-Lever Act, $128,083.33 was used for carrying on demonstrations by means of county agents, $69,890.05 for demonstration work in home economics, $32,944.29 for demonstrations by means of boys' clubs, and $33,821.65 for demonstrations by means of movable schools. There was also spent $86,278.39 for paying the salaries and expenses of the administrative officials, and $8,241.16 for the printing and distribution of extension publications. The remainder of the Smith-Lever fund was spent for the salaries and expenses of a number of extension specialists in dairying, horticulture, agronomy, farm management, animal husbandry, and so forth.

The total amount of money expended for the cooperative agricultural extension work approximated $3,600,000, derived from the following sources; Smith-Lever, $475,000; State funds appropriated specifically for extension work, $725,000; appropriations by county authorities, $780,000; funds under the direct control of the college $820,000; appropriations to the Department of Agriculture for farmers' cooperative demonstration work, over $900,000; appropriations to other bureaus and offices of the department, over $100,000

and $290,000 from various other sources, such as farmers' organizations, chambers of commerce, and individuals.

Of this total amount from all sources, over one-half was used for demonstrations by means of county agricultural agents. The next item in importance was the demonstrations in home economics with a total of over $320,000. Among the other important items were $200,000 for movable schools, $165,000 for boys' clubs, $300,000 for administration, $106,000 for dairying, and $72,000 for the printing and distribution of publications. The remainder was spent for other types of specialists to aid and strengthen the work of the county agents.

The total number of agricultural counties in the United States was estimated at 2,920. At the beginning of the year, 929 of these counties had the services of a county agent, while at the end of the year 1,136 had such services.

In the 15 Southern States, 1,229 agents were employed, of whom 400 were women, including 15 State agents, 21 assistants, 14 specialists, and 350 county home demonstration agents. There were 53 negro agents in 11 States. In the 33 Northern and Western States there were 340 county agricultural agents. The home-economics work was done by women who went out from the colleges. It took the form of lectures, demonstrations, and short courses or schools, of which 335 were held during the year.

In the 48 States, 1,809 extension workers of all kinds were employed full time, 149 half time, and 643 less than half time. Of these, 297 were connected with the experiment stations, and 401 with college teaching.

In the club work in the Southern States 62,842 boys and 45,581 girls were enrolled; in the Northern and Western States club work was done by 151,194 boys and girls.

Farmers' institutes during the year ended June 30, 1915, were in charge of the agricultural colleges in 24 States and of the State governments in 24 States. The 20 colleges reporting on this work held 4,561 institutes, with an aggregate attendance of 1,039,501. State departments in 18 States reported to the farmers' institute division of the Office of Experiment Stations that they had held 4,498 institutes with an attendance of 2,115,266.

THE STATES RELATIONS SERVICE AND PRE-WAR COOPERATIVE EXTENSION WORK, 1915 TO 1917

The States Relations Service (*189*) was established July 1, 1915. It included the Office of Experiment Stations (except the irrigation and drainage investigations, transferred to the Office of Public Roads) and the farmers' cooperative demonstration work transferred from the Bureau of Plant Industry. The service had a bureau organization constituted as follows: (1) The office of the director, including divisions of administration, agricultural instruction, and farmers' institutes, (2) the Office of Experiment Stations, (3) the Office of Extension Work in the South, (4) the Office of Extension Work in the North and West, and (5) the Office of Home Economics. The writer was director of the service, Bradford Knapp was chief of the Office of Extension Work in the South, and C. B. Smith was chief of the Office of Extension Work in the North and West.

The service was thus in a position to deal with all the activities of the Department of Agriculture with the agricultural colleges, schools, and experiment stations, and to coordinate the Federal business relating to these institutions, as far as extension work was concerned.

The chief officers of the service had had long experience in the transaction of such business and personal acquaintance with agricultural and institutional conditions in all parts of the country. The policies governing the cooperative extension work which had been begun under the States Relations Committee were carried over into the new service.

Dividing the extension work of the service between two offices was from the outset recognized as not ideal. However, the general differences in agricultural, economic and social conditions and in the organization of extension work in the two great sections of the country made it seem advisable to continue, at least for a time, the separate organizations which had previously existed in the Bureau of Plant Industry. With the development of extension work throughout the country as an organic part of the work of the agricultural colleges, it was expected that its standards and methods would so far approximate uniformity that unity of organization of the extension business would come about in the department.

Beginning with July 1, 1915, the additional Federal appropriation under the Smith-Lever Act became available, to be allotted to the States on the basis of rural population and to be offset with equal sums derived from sources within the States. Since the State and county funds available for this purpose from year to year were uniformly in excess of the required offset there was no difficulty in carrying out this provision of the act. The inequalities of legal distribution of the Federal funds governed by conditions in the several States were to a considerable extent relieved in the distribution of the Federal funds for farmers' cooperative demonstration work, which required no State offset.

During 1915 and 1916 particular attention was given to determining and developing the functions and work of the county agricultural agents. By reason of their new relations with the agricultural colleges and the rapid increase in the number of farmers who were interested in their operations, it was recognized that these agents should not only have broad agricultural training but should function largely as organizers.

Personal service to individual farmers, while remaining an important feature of their work, had to be subordinated to activities involving group action of farming people, and submitting county agricultural problems to the agricultural college and the Department of Agriculture for help by means of their specialists, reports of researches, and popular publications. To meet the new conditions arising from the broader requirements of the work of the county agents, the State leaders had to seek better-trained men to fill the vacancies and the new positions in county work, and to bring the agents already in service into closer contact with the colleges through conferences at the institutions. To aid the leaders in solving new problems arising in their work, regional and national conferences began to be held.

By June 30, 1917, there were about 860 county agents in the South and 540 in the North and West, making 1,400 in the 48 States, as compared with 1,136 in 1915. There were also 66 negro agents in the South.

To promote group cooperation of farmers with county agents, advantage was taken in the Northern and Western States of the farm-bureau movement, which became increasingly popular. The functions of the county farm bureaus as general agencies for the promotion of extension work were emphasized. The county agents assisted in the organization of the farm bureaus and largely determined the forms of their activity. In 1917 there were 374 farm bureaus with a membership of about 100,000.

In the South particular attention was given to the formation of small community organizations "to study local problems, to participate in the demonstrations, and to get the entire membership to practice the improved methods illustrated in the demonstrations" (*201*). Local existing farm organizations were often used for this purpose. By 1917 there were 3,500 community organizations in the South, with a membership of 112,316. Somewhat loose county organizations were sometimes formed "of representatives from the community organizations, meeting with the county agent, the county school superintendent, and other officials, and occasionally with representatives of business or commercial organizations of the cities or towns" (*201*).

HOME DEMONSTRATION WORK

In the South home demonstration work among farm women was greatly increased and broadened during 1915 and 1916. The number of counties having home demonstration agents increased from 279 in 1914 to 418 in 1916. The total number of women agents in the latter year was 451, under whom 22,048 women were enrolled in 1,042 clubs. The work which had begun "with teaching the growing and cultivation of a single plant (the tomato) and the utilization of its fruit" had spread until it included "instruction in every vegetable and fruit grown in the South" and embraced "not only the household conveniences and labor-saving devices in the home but also the convenient arrangement of the home itself and its surroundings" (*201*). In addition, there were such activities as instruction in butter making, poultry breeding and management, and cooperative selling of eggs and other products. With the aid of women's clubs and business organizations, rest rooms were established in more than 100 towns, connected with which in many cases were demonstration kitchens and home-economics libraries.

The home demonstration clubs often undertook the promotion of school and community improvement and "notably increased social intercourse in their communities." After the home demonstration work was brought into organic connection with the extension work of the agricultural colleges a few home-economics specialists were employed to aid the county workers. Since these colleges in a number of the Southern States were not coeducational, the extension work in home economics had to be organized as a special division in the college or, in the case of Florida and South Carolina, was conducted under a cooperative arrangement with the State college for women.

In the Northern and Western States the home-economics departments of the land-grant colleges had been accustomed to do extension work through members of their faculties, and after the passage of the Smith-Lever Act they were at first averse to the establishment of home demonstration agents in the counties. The economic conditions and the habits of the farm women in these States made it inexpedient to follow the plan of work which proved so popular in the South. Farm bureaus were organized almost exclusively to promote the work of the county agricultural agents and at that time gave little attention to the needs of the farm women. Up to July 1, 1915, only in Illinois, Massachusetts, New York, and Pennsylvania had even one woman been employed with State funds in county demonstration work. The first woman county agent employed on cooperative funds began work in Sullivan County, N. H., in April, 1916. Special home-economics projects were cooperatively conducted during the spring of 1916 in Maricopa County, Ariz., Canyon County, Idaho, and St. Joseph County, Mich., by the State colleges and the Department of Agriculture. On July 1, 1916, there were 12 county home demonstration agents in 10 Northern and Western States. On June 30, 1917, there were 17 county agents, in addition to 97 home-economics specialists, in the 33 States.

The means by which these specialists going out from the colleges reached farm women were as follows: (1) Bulletins and circulars supplementing the work of the specialist by furnishing practical information; (2) single demonstrations and lectures given before such organizations as the Grange and the Federation of Women's Clubs; (3) personal visits to homes to learn of the needs and problems of individual housekeepers and to give counsel; (4) home-economics extension schools, 450 of which instructing 27,000 women were conducted during the year; (5) home-economics study clubs, of which there were at that time approximately 1,350 in the 33 States, with a total membership of 19,210 women, working together to apply and make permanent the work of the home-economics specialist; and (6) home-makers' tours, which gave opportunity for the inspection of household conveniences, heating, lighting, and water systems, arrangement of home furnishings, farm gardens, and lawns.

BOYS' AND GIRLS' CLUB WORK

In the South the boys' club work continued to be managed by the county agricultural agents and was materially increased under the Smith-Lever Act. In 1915 the total project enrollment was 63,842 and in 1916 it was 75,605. Of these boys, 37,312 were in the corn clubs and 23,167 in the pig clubs. There were also cotton, peanut, potato, grain-sorghum, baby-beef, poultry, and crop-rotation clubs. The pig and poultry clubs were conducted in cooperation with the Animal Husbandry Division of the Bureau of Animal Industry. Short courses at the agricultural colleges or in camps were given to the prize-winning boys in nearly all the Southern States.

The girls' clubs in the South continued to be managed by the home demonstration agents. In 1915 the enrollment totalled 45,581 and in 1916, 56,679, of whom 37,964 were in canning clubs and 9,656 in poultry clubs. Clubs also did bread making, sewing, and special

work with fall and winter gardens. The girls' work was closely associated with the women's extension work, and there were stimulating reactions on both sides.

In the Northern and Western States club work with boys and girls was strongly developed in 1915 and 1916 in accordance with a unified program. State, assistant State, and district leaders had general supervision of the work. In several counties special paid leaders were employed, and in other counties the agricultural agents conducted the work. Several thousand volunteer leaders had immediate charge of local clubs. These workers included county superintendents of schools, school teachers, members of women's organizations, members of breeders' and growers' organizations, members of granges, business men, leaders in religious organizations, local pastors, and other interested citizens. In several States the club work was connected with the schools, and sometimes the teachers were employed as club agents during the summer. About 30 per cent of the children enrolled in the clubs were not in attendance at the public schools. Farm bureaus in increasing numbers took an interest in the club work. Special efforts were made to fit this work into the general farm-bureau program for the improvement of agriculture and country life. The State leaders and their assistants, in cooperation with the subject-matter departments of the colleges, prepared plans for organization and follow-up instruction, conducted training schools for leaders, and assisted in organizing clubs, giving demonstrations, and conducting exhibits. In 1916 about 198,000 boys and girls were enrolled in clubs, grouped according to their home projects, including work with corn, potatoes, sugar beets, alfalfa, gardening, poultry, calves, pigs, bread, sewing, and handicraft. Demonstrations at meetings of the boys' and girls' clubs, granges, farmers' institutes, and women's clubs and at community, county, and State fairs, were an important feature of the club work. Competitive demonstration teams increased the interest in club work among children and adults. These teams often gave demonstrations at fairs where club products were exhibited. Club members were encouraged by observation tours and by scholarships and other prizes. They were instructed by printed and mimeographed literature issued by the colleges and the Department of Agriculture relative to their projects and by attendance at extension schools or short courses at colleges and elsewhere. In 1916 it was reported that the profits of club work during the previous five years were being used to support 102 boys and girls at normal schools and colleges.

EXTENSION SPECIALISTS

The number and variety of extension specialists connected with the agricultural colleges grew steadily in all the States as funds for their work increased under the operation of the Smith-Lever Act. The most important projects in which the subject-matter specialists were employed were those in dairying, animal husbandry, poultry, agronomy, horticulture, agricultural engineering, farm management, marketing, rural organization, and home economics. There was also work in some States in botany and plant pathology, entomology, and forestry. The work of the college specialists in all these lines was

supplemented by that of the specialists from the department bureaus operating cooperatively.

The extension specialists participated in agricultural meetings, farmers' institutes, and extension schools and conferences, and, on calls from the county agents, often visited localities where special problems had arisen and took part in demonstrations and other work. They prepared many publications and other material distributed for use in extension work and carried on a large amount of correspondence with extension agents and farming people.

The Bureau of Animal Industry was especially active in its cooperative work on pig and poultry clubs, dairying and hog cholera, and the Bureau of Markets in aiding communities to organize for cooperative buying and selling.

The farm-management demonstrations which had been a unique feature of the extension work of the Bureau of Plant Industry were carried over into the States Relations Service and became a permanent activity of the Office of Extension Work in the North and West. In 1917, 27 States cooperated in this work, 24 State agents were employed cooperatively, and the number of counties with supervised farm-management demonstrators had risen to 342. The business on many farms was analyzed, suggestions for its improvement were made, and that year 12,797 farmers undertook to keep accounts.

While many operations were carried on by extension specialists at this time the planning and execution of their work were not well organized nor was the work fitted into the cooperative extension system. The subject-matter specialists at the colleges often operated somewhat independently of each other and of the extension directors and the county agents, with the result that often too many specialists were operating at once in a county, and often the county agent heard only incidentally of their presence there, or, if he knew of their coming was embarrassed because their work did not fit in well with the county extension program. Federal extension agents from different bureaus in many cases were ignorant of, or disregarded, the memorandum of understanding with the colleges and undertook independent enterprises within the States. The State extension agents, on the other hand, often took up matters directly with the department bureaus instead of going through the States Relations Service. Even within this service there was at times a tendency to deal directly with the county agents as had been customary prior to the passage of the Smith-Lever Act.

FARMERS' INSTITUTES

By 1917 the number of States in which farmers' institutes were under the State departments of agriculture had declined to 17, and the special forms of institute activity which had been developed prior to the passage of the Smith-Lever Act had been almost entirely abandoned. The 14 States reporting that year to the States Relations Service held 3,034 institutes, with an aggregate attendance of 997,377. They employed 454 lecturers, of whom 177 were from the agricultural colleges and experiment stations.

The 22 agricultural colleges reporting held 3,958 institutes, with an attendance of 1,389,553. The extension divisions employed 966 lecturers in this work, of whom 417 were not on the extension staff.

The large attendance at institutes showed that the farmers in many States still considered such meetings interesting and valuable.

EXTENSION FORCES AND FINANCES

By June 30, 1917, the total number of persons engaged in cooperative agricultural extension work had increased to 4,100, of whom 1,117 were women. Of these workers 3,025 were on full time, 336 on more than half time, and 739 on less than half time. Among the part-time workers were 238 officers of the experiment stations and 291 members of college faculties. The number of counties having an agricultural agent was 1,434, and a home-demonstration agent, 537.

About $6,100,000 was used in extension work during that fiscal year, of which $1,580,000 was from the Federal Smith-Lever fund, $1,100,000 from the State Smith-Lever offset, $960,000 from the appropriation to the States Relations Service for farmers' cooperative demonstration work, $185,000 from appropriations to other Department of Agriculture bureaus, $635,000 from State funds in excess of Smith-Lever offset, $200,000 from college funds, $1,260,000 from county funds, and $245,000 from various sources such as farm organizations, chambers of commerce, and individuals.

About $3,000,000 was used for the work of the county agricultural agents, $740,000 for the home demonstration agents and home-economics specialists, including girls' club work, $320,000 for boys' clubs, $170,000 for extension schools, $145,000 for animal husbandry, $210,000 for dairying, $100,000 for farm management, $100,000 for special crop work, $135,000 for publications, and $510,000 for supervision and administration. The remainder was spent for correspondence courses, farmers' institutes, educational exhibits at fairs, the work of miscellaneous specialists, and for other farm and home improvement.

THE AMHERST CONFERENCE ON ADMINISTRATIVE PROBLEMS

As the cooperative extension system developed and became more complex, various difficulties of understanding and administration arose, and Federal and State extension workers held conflicting views and were uncertain as to correct procedure on various more or less important matters.

With a view to adjusting these difficulties, a conference of the executive and extension committees of the agricultural college association with the director and extension chiefs of the States Relations Service was held at Amherst, Mass., July 11 to 13, 1916.

Prior to this meeting, information on specific differences had been collected from the State extension directors by the extension committee. On this basis the Amherst conference had a full, free, and frank discussion of the whole situation and reached conclusions embodied in a statement reported to the association at its meeting November 15 to 17, 1916 (*1*). The chief decisions made at this conference were as follows:

(1) That all work within the States should be done through the directors of extension, and that there should be no communication between the States Relations Service and the workers within the States except as delegated by the directors; (2) that an effort should be made to differentiate between the educational and regulatory work as carried on by the United States Department

of Agriculture (e. g., work relating to hog cholera), and that the educational work should be organized through the colleges, but it should be recognized that the cooperation of other agencies, such as State boards of agriculture or livestock sanitary boards, is necessary to the successful prosecution of the work; (3) that the executive committee, acting in conjunction with the States Relations Service, should present to the Secretary of Agriculture matters outside the power or jurisdiction of that service and the extension committee of the association; (4) that the States Relations Service should not appoint subject-matter specialists for service within the States, except as they were to work with the extension directors; (5) that national and district conferences should be called jointly by the States Relations Service and the extension committee, and programs should be made in the same way; (6) that in submitting plans of work for the department's approval a contingent fund not to exceed $5,000 might be reserved for later assignment to approved projects; (7) that as rapidly as possible the department should adopt a uniform system in allotting cooperative demonstration funds to the States and conducting extension work with such funds; (8) that salaries should as far as possible be so adjusted as to allow extension workers in the States paid from cooperative funds a reasonable vacation such as was customary for other members of the extension staffs; (9) that reports of finances and work under the Smith-Lever Act need not necessarily include reports on all State funds used in extension work but that such comprehensive reports were desirable as a matter of public information; (10) that all reports of extension workers should be submitted to the extension directors, who should send to the States Relations Service such copies or excerpts as might be necessary under the law or agreed to by the parties concerned.

The results of this conference were favorably received and undoubtedly promoted better relations between the State institutions and the department in the development of the cooperative extension system. But as might have been expected in such a new and broad enterprise, readjustment on disputed matters proceeded but slowly and imperfectly. Moreover, as the United States became more and more entangled in the World War, the relations of the Federal Government with the States were inevitably changed, and this had a considerable effect in the practical conduct of the extension work.

In a large way, however, the first three years of operation under the Smith-Lever Act settled the principles and methods for the successful and permanent establishment of a national system of extension work in agriculture and home economics, in which Federal, State, and county forces were to cooperate closely and in which many thousands of farm men, women, and children were to participate. By 1917 a strong cooperative extension organization had been established in every State. On this organization a much heavier and more important burden was about to be placed than had been dreamed of when the Smith-Lever Act was passed.

WAR-TIME EXTENSION WORK, 1917 AND 1918

FOOD PRODUCTION AND CONTROL

As the war in Europe progressed and millions of men were taken away from productive labor, the demand for American food products increased greatly. This was particularly true of wheat, which is especially important from a military point of view. The year 1916 was quite generally a poor crop year. In the United States that year the production of cereals was comparatively low, aggregating 4,806,000,000 bushels, as compared with 6,010,000,000 bushels in 1915. The wheat crop of 1916 was only 630,886,000 bushels as compared with a record production in 1915 of 1,026,000,000 bushels. The world

production of wheat for 1916 also was unsatisfactory, and the prospects for the ensuing year were not good. The potato crop in the United States in 1916 was only 285,437,000 bushels, whereas in 1915 it was 539,721,000 bushels. The supply of meats and of poultry and dairy products was comparatively large, but the foreign demand was great and increasing and much was being exported. Prices of food products were rising rapidly. Farmers were therefore being urged to increase production of food and feeds, and were making a tremendous effort to comply with the demand. There was also a great demand for cotton for war purposes. Agricultural conditions everywhere brought increased burdens on the extension forces throughout the country, and there was a general recognition that these forces must be expanded in order that they might give greater aid to every branch of agriculture and to food production and conservation in particular.

To the great quantities of foodstuffs consumed by the nonproducing armies of the world were added those cargoes sunk at sea. Producers everywhere redoubled their labors to meet the increased demand for supplies.

As Federal and State councils of defense and other public and private agencies engaged in war work were often in cooperation with the extension forces, a brief account of such organizations is given.

The Council of National Defense authorized by Congress in the Army appropriation act of August 29, 1916, was permanently organized March 3, 1917, "for the coordination of industries and resources for the national security and welfare." It consisted of the Secretaries of War, Navy, Interior, Agriculture, Commerce, and Labor. At its request councils of defense were formed in all the States by June 30, 1917.

On April 21, 1917, the Council of National Defense appointed a woman's committee, with Anna Howard Shaw as chairman. At its first meeting this committee called for an organization in each State, the District of Columbia, Alaska, and Hawaii to cooperate with the State councils of defense. These organizations of women had for their objects (1) registration of women for service approved by the Council of National Defense, (2) cooperation with the Department of Agriculture in food production and home economics, (3) cooperation with the Department of Labor and the committee on labor of the advisory commissions on the work of women in industry, (4) cooperation with the Children's Bureau on child welfare, (5) cooperation with the Red Cross on home and foreign relief, and (6) promotion of women's work to maintain existing social-service agencies, health, recreation, educational propaganda, liberty loans, and other socializing influences. On June 19, 1917, a conference was held at Washington by the woman's committee, at which 60 national organizations of women were represented by about 200 delegates.

Food-production and food-control bills were introduced in Congress, but there was considerable delay in their passage. Meanwhile Herbert C. Hoover, who had been in charge of the large private fund for the relief of the Belgians, was called home and put at the head of a temporary food board, which made preliminary studies and arrangements for food conservation and control. On June 12, 1917, the President, in a letter to Mr. Hoover, authorized him to proceed

at once with the mobilization of the voluntary forces of the country which might aid in conserving food and eliminating waste. This work was carried on throughout the war by the Food Administration under Mr. Hoover's direction.

The Red Cross not only used active propaganda to obtain funds for service of relief connected with military operations, but undertook work on diet and food preparation and conservation in the homes, thus adding interest to the work of its many new local chapters.

Other voluntary agencies entered with varying degrees of enthusiasm into work relating to the production and conservation of food.

Meanwhile the cooperative agricultural extension forces in the several States were passing through a period of uncertainty and confusion after the declaration of war. The call for troops and for men to engage in various forms of war service led a considerable number of extension workers to enlist or otherwise place themselves at the disposition of the Government. It was increasingly difficult to fill the places thus vacated with well-trained men, or to find trained men for the new positions requiring the services of extension agents, particularly in counties where they had not hitherto been employed.

The feverish haste to create State and local organizations to deal with war problems brought into them many inexperienced persons largely ignorant of the extension organization and its work. Some persons in these war organizations planned and attempted work in the extension field without the spirit or desire for cooperation with the existing permanent organization.

Pending the passage of the food-production bill, the extension authorities were importuned for agents, particularly by counties, and they could only meet this demand in part as limited amounts of State or local funds were provided for expansion of the work. While the extension forces were enthusiastically desirous of helping to win the war, there was as yet no well-defined national policy or program for agricultural or home-economics work to meet the war conditions.

As soon as war was declared it was realized that the Nation must move as a unit and that the initiation and conduct of programs for production and conservation of material resources, as well as the assembling and management of military forces, must in the last analysis belong to the Federal Government. The majority of people cheerfully accepted this situation and devoted themselves earnestly to carrying out the policies and requests of the Federal Government.

Early in 1917 the Secretary of Agriculture had called on the South to supply, as far as possible, its own food and feed stuffs and had emphasized the need of growing sugar-beet seed in this country and had advised greater care in the production of livestock. On March 27 he—

> issued a statement urging farmers to adopt measures to secure maximum returns from the farms. Special attention was directed to the necessity of careful seed selection, of controlling plant and animal diseases, and of conserving farm products through proper storage, canning, drying, and preserving. On the 5th of April a special plea was made for an increased production of corn and hogs, and on the 7th of April [an appeal was made] to the farmers to increase the output of staple commodities as well as of perishables (*212*).

On April 9 and 10, in response to his call, a conference was held at St. Louis, Mo. (*212*). This was attended by representatives of several bureaus of the Department of Agriculture and 65 officials from the agricultural colleges of 32 States and 20 State departments of agriculture. On April 11 about 75 representatives of the agricultural press were present at a supplementary meeting of this conference. Two days later, a similar conference for the States west of the Rocky Mountains was held at Berkeley, Calif., to which the conclusions of the St. Louis conference were transmitted.

The major problems considered [in these meetings] were the production of sufficient foods and feedstuffs not only for this country, but also for the nations of Europe with which we are associated in this war, the conservation of farm products and of foods, the mobilization of farm labor, the regulation of storage and distributing agencies, and the further organization of all the Nation's agricultural instrumentalities—national, State, and local. A comprehensive program for execution under existing law and for additional legislation was unanimously adopted (*212*).

On April 23 a meeting of representative farmers was held at Washington, in response to Secretary Houston's invitation (*212*). Those present were mainly officials of the National Grange, the Farmers' Educational and Cooperative Union, the Gleaners, and the Farmers' National Congress. In general they indorsed the program agreed on at the other conferences.

On April 18, in compliance with a resolution of the Senate, Secretary Houston transmitted to that body "proposals for increasing the production, improving the distribution, and promoting the conservation of farm products and foods," (*212*) based largely on the program of the St. Louis and Berkeley conferences. The Committee on Agriculture in each House soon afterward held extensive hearings on this matter and finally formulated the food-production and food-control bills. After an extended debate these bills were passed and were approved by President Wilson August 10, 1917.

Meanwhile the Federal and State Departments of Agriculture, the agricultural colleges, farmers' organizations, and other agencies took action cooperatively to put into effect the recommendations of the conferences for "more perfect organization and coordination of the Nation's agricultural activities." In particular, an effort was made to secure in each State, in connection with the Council of Defense, "a small central division of food production and conservation composed of representatives of the State department of agriculture, the land-grant college, farmers' organizations, and business agencies" (*212*).

The food control act was an elaborate measure—

to assure an adequate supply and equitable distribution, and to facilitate the movement of foods, feeds, fuel including fuel oil and natural gas, and fertilizer and fertilizer ingredients, tools, utensils, implements, machinery, and equipment required for the actual production of foods, feeds, and fuel, hereafter in this act called necessaries; to prevent, locally or generally, scarcity, monopolization, hoarding, injurious speculation, manipulation, and private controls, affecting such supply, distribution, and movement; and to establish and maintain governmental control of such necessaries during the war. (*213*).

Among the greatly extended powers conferred on the President under this act, many dealt with the control and distribution of foods. He might requisition them for the Army or Navy, and might purchase, store, and sell to the public wheat, flour, meal, beans, and

potatoes, and in an emergency requiring stimulation of wheat products he might fix a minimum guaranteed price. He might purchase and sell nitrate of soda at cost. An appropriation of $152,500,000 was provided for the enforcement of this act, with $10,000,000 additional for the purchase of nitrate of soda.

On August 10, 1917, the President established the United States Food Administration and made Mr. Hoover the United States Food Administrator. On August 23, 1917, H. A. Garfield was appointed United States Fuel Administrator. The Food Administration was to carry into effect the provisions of the food control act relating to foods, feeds, and their derivative products. All departments and agencies of the Government were directed to cooperate with the Food Administrator.

The problems before the Food Administration were stated by Mr. Hoover as follows:

> First, to stimulate in every manner the saving and wise use of food, in order that we may increase vitally needed exports to the allied nations.
>
> Second, to so guide the trade in fundamental food commodities as to eliminate injurious speculation, hoarding, extortion, and wasteful practices, and to stabilize prices in the essential staples.
>
> Third, to coordinate our exports so that against the world's shortage we will retain sufficient supplies for our own people and at the same time prevent inflation of prices (*218*).

In order to project the work of the administration into the local communities throughout the country, Federal food administrators were appointed in each State to "supervise the control and distribution of the food supply in each State along the lines determined upon by the national organization and coordinate all existing governmental organizations in their State so that there is a definite channel from the State authorities to the home and those that live therein."

To impress upon people the vital necessity of reducing American consumption and waste of commodities required for export, it was decided to conduct an educational campaign throughout the country. As an important item in this campaign "pledges were taken from more than 11,000,000 homes to observe the suggestions of the Food Administration as to food saving and food use." A division of publication and printing was established to prepare publications on food conservation and allied subjects. A speaking section directed the efforts of and furnished material for the large number of volunteer public speakers working under the Food Administration.

The food production act (*214*) was intended "to provide further for the national security and defense by stimulating agriculture and facilitating the distribution of agricultural products" (*212*). Its administration was lodged in the Department of Agriculture. It carried an appropriation of $11,346,400 for the following purposes:

> 1. The prevention, control, and eradication of the diseases and pests of livestock; the enlargement of livestock production; and the conservation and utilization of meat, poultry, dairy, and other animal products, $885,000.
> 2. Procuring, storing, and furnishing seeds for cash at cost to farmers in restricted areas where emergency conditions prevail, $2,500,000.
> 3. The prevention, control, and eradication of insects and plant diseases injurious to agriculture, and the conservation and utilization of plant products, $441,000.
> 4. The further development of the Extension Service which is conducted in cooperation with the agricultural colleges in the various States, $4,348,400.
> 5. Surveys of the food supply of the United States, gathering and disseminating information concerning farm products, extending and enlarging the market

news services, preventing waste of food in storage, in transit, or held for sale, giving advice concerning the market movement or distribution of perishable products, and investigating and certifying to shippers the condition as to soundness of fruits, vegetables, and other food products received at important central markets, $2,522,000.

6. The development of the information work of the department, enlarging the facilities for dealing with the farm-labor problem, and extending the work of the Bureaus of Crop Estimates and Chemistry, $650,000 (*212*).

The food control and food production acts dealt with such closely related matters that it was evidently necessary to have cooperation and agreement between the Food Administration and the Department of Agriculture. "It was impossible completely to dissociate them and undesirable to do so" (*212*). After a full conference between the heads of these Federal services a working agreement was reached, which was substantially as follows:

In a broad way, the Food Administration has as its prime functions the control and regulation of the commercial distribution of foods and feedstuffs, that is, of products which have reached the markets and are in the channels of distribution or in the hands of consumers, their conservation by consumers, and the elimination of waste, through the employment of regular official as well as volunteer agencies.

The Department of Agriculture continues to administer the laws placed under its jurisdiction and to direct its activities in reference to production. It also continues to make the investigations authorized by Congress and to furnish assistance to farmers and livestock men in the marketing of their products; to stimulate organization among producers for the distribution of their products to the markets; and to promote the conservation of farm and animal products, especially of perishables through canning, drying, preserving, pickling, and the like. It retains its work in home economics, as provided by law, and cooperates in this field as heretofore with the agricultural colleges, through the Extension Service. It directs all these undertakings in greatly expanded form under the *authority and with the funds provided by the* Food Production Act. In their promotion it utilizes its own official machinery and enlists the aid of volunteers (*212*).

In the midst of the unusual conditions of agriculture and country life brought about by the World War and the operations of the new Federal, State, and local organizations temporarily performing work bearing on agriculture and home affairs, the cooperative agricultural extension service entered on a somewhat narrower but greatly increased work which involved many close and often delicate contacts with both public and private agencies engaged in war work. In its Federal relations, the extension service pursued its regular activities directing the production and distribution of crops and livestock and the use of agricultural products in the home, assisted the War and Navy Departments in the mobilization of military forces, aided the Treasury Department in its Liberty-loan campaigns, cooperated with the Labor Department in the war organization of labor on the farms and elsewhere, and cooperated with the Federal and State councils of defense, the Food Administration, and the Red Cross in many enterprises. It also held thousands of meetings, at which addresses were made to acquaint farmers and people generally with the issues of the war.

In its State and local relations it had many new contacts with the councils of defense, the food administrators, the Red Cross, and other organizations doing war work. When it became apparent that the food production act would pass, special efforts were made to increase the number of men and women agents in the counties, and

when that act went into effect the county forces were rapidly expanded. The Federal emergency funds were used under the direction of the States Relations Service in accordance with the procedure already established under the Smith-Lever Act. "By the end of October [1917] more than 1,600 emergency demonstration agents, men and women, had been appointed, making a total of approximately 5,000 cooperative extension workers, including the specialists performing extension work, employed through both State and Federal regular and emergency funds" (*212*). Approximately 750 additional counties were cooperating in employing county agents. About 600 women were employed with emergency funds, of whom 500 were working in counties, principally among farm women, and 100 exclusively in urban communities. In all, about 1,300 women were working under the Smith-Lever and food-production acts. Over 100 additional leaders on boys' and girls' club work were employed. War conditions required active organizations of farming people to support the extension agents and participate in the planning and conduct of the extension work. Therefore the State and county extension agents promoted the formation of such organizations. Before the end of 1927 the community organizations in the 15 Southern States increased from 1,712 with 44,458 members in 1915 to 3,507, with 112,316 members. In the 33 Northern and Western States the number of farm bureaus and similar organizations was increased to 374, with 98,654 members.

In the South in 1917 the agricultural production compaign was conducted in accordance with a program for "safe farming." This involved—

> the production on every farm of the food for the family and the feed for the livestock, as a means of economic safety. An increase of corn, hay, peanuts, soy beans, velvet beans, and home gardens, including both Irish and sweet potatoes, and sorghum or cane for sirup, for human food and for feed for the livestock, was asked. The program also emphasized the importance of each farm being, as nearly as possible, self-sustaining. It recommended the supplying of milk, eggs, and meat for the family on every farm and an increased production of all of these food products, so that the excess might supply cities and towns. After the food supply had been amply cared for, it recommended the production of cotton as the main cash crop in all cotton territory (*217*).

Among the satisfactory achievements in 1917 was the transfer, through cooperation of the Bureau of Animal Industry and the county agricultural agents, of 300,000 head of cattle from drought-stricken localities in western Texas to the States farther east where there was plenty of pasturage. Assistance was given to the owners of livestock remaining in Texas by locating supplies of feed and arranging for their purchase.

In the Northern and Western States increased production of crops and livestock was actively promoted by the county agricultural agents. In a number of States crop and labor surveys were made. Over 132,000 farmers were assisted in obtaining seed for various crops; many tractors were procured and used; 66,000 laborers were supplied to farmers through agents or farm bureaus; over 160,000 persons were assisted in home gardening.

The home demonstration agents in the South in 1917 aided a greatly increased number of adult women in canning, drying, preserving, and brining immense quantities of fruits and vegetables.

They also instructed women in the home canning of meats, fish, or other sea foods, as well as game, including rabbits, wild ducks, and geese. Much food for home use was also produced in summer and winter gardens.

In the Northern and Western States efforts were made to spread the extension work in home economics over a wide territory and, particularly, to locate a home demonstration agent in each county and principal city. By the end of 1917 there were 35 State leaders, 30 assistant State leaders, 282 county home demonstration agents, and 57 urban agents. Special emphasis was laid on food conservation and preservation, as in the Southern States, and on the use of perishable and locally produced foods to lessen the demands on transportation facilities. Demonstrations were given on the conservation of wheat by mixing corn, barley, and potatoes with flour in bread making. Excessive use of meat and sugar was discouraged. Greater use of milk was encouraged. Home gardening was stimulated.

In the cities many organizations were already working on the war problems relating to food production and conservation before urban home demonstration agents began to be appointed. It was therefore chiefly the business of those agents to assist the city housekeepers through existing organizations by giving them expert information, helping them to use locally produced foods or those to which they were not accustomed, and demonstrating improved methods of canning or otherwise preserving food materials.

Both the rural and urban home demonstration agents did much to acquaint foreign-born women in America with the policies of the Government and with the need for increased food production and conservation. Special schools, special committees, and specially prepared literature were utilized in this work.

As counties with home demonstration agents were relatively few, county agricultural agents were led to increase their work with rural women. As far as possible they had the aid of the home-economics leaders and specialists from the colleges, but were often compelled to rely on their own efforts, with the assistance of such trained or practically competent women as they could find in their counties. In the Northern and Western States in 1917 the county agricultural agents reported that 7,631 demonstrations were held for women, over 4,500,000 quarts of fruits and vegetables were canned, and 467,000 pounds were dried as the result of campaigns.

In 1917 the boys' and girls' club work was greatly expanded throughout the United States. In the South, where the county agricultural agents managed the boys' clubs, the regular enrollment increased from 75,605 in 1916 to 115,746 in 1917. In addition, about 300,000 boys were enrolled as emergency workers, who pledged themselves to do something to increase food production. In the girls' club work under direction of the home demonstration agents the number enrolled for regular work in canning and poultry clubs increased from 47,620 in 1915 to 73,306 in 1917, and 980,272 enrolled for emergency work.

In the Northern and Western States, 32 State leaders, 158 assistant State leaders and district leaders, and 98 county leaders devoted their entire time to the boys' and girls' club work. Much work of this kind

was also done by the county agricultural and home demonstration agents, and 11,325 volunteer leaders had immediate charge of local clubs. Over 160,000 boys and girls completed their work and made reports, and more than twice as many did some work.

Throughout the country boys' and girls' clubs also took an active part in the campaigns for the Red Cross, Liberty loan, and other patriotic enterprises.

The war continued through all the crop season of 1918, and even after the armistice the unusual demand for food and feeds continued at home and abroad. The expansion of the extension forces went on during 1918. Although the first Federal emergency fund was for the fiscal year ended June 30, 1918, only, it was evident that Congress intended to renew this fund. The extension authorities therefore kept their forces at the high level which they had attained. The appropriation of November 21, 1918 was $6,100,000. The number of extension workers reached its maximum about June 30, 1918, when the number of counties with agricultural agents was 2,435 and with home demonstration agents, 1,715. The total number of persons employed in the States with cooperative extension funds was 6,725. The men employed as State, district, and county agents numbered 4,399, and there were 2,329 women. Of these, 5,507 were full-time workers, 272 more than half-time workers, and 866 less than half-time workers. Counting the force in Washington, D. C., as well as those employed in the States, 7,000 persons were carried on the rolls of the States Relations Service. To this should be added about 500 persons not paid from cooperative funds. There was increased difficulty in finding properly trained men for the extension service. Not only the constant urge to join the Army or Navy, but also the demand for skilled men in various industries and on the farms drew away extension workers and caused an excessive turnover in their ranks. In the Southern States, out of about 1,000 extension agents on June 30, 1917, 289 entered the Army, 26 the Navy, and 13 special war work at Washington. The rapid turnover in the extension ranks and the inexperience of many of the new workers were serious hindrances in extension enterprises. These difficulties were, however, overcome to a considerable extent by the loyalty, diligence, and enthusiasm with which the extension forces operated and by the willingness of farming people to take advantage of the services of the extension agents.

The organizations of rural people supporting the extension forces and participating in extension work increased greatly in number and enrollment during 1918. In the 15 Southern States many county and community organizations were in existence under various names. There were also county and local units of the Grange and Farmers' Union which cooperated with the extension forces. In West Virginia there were farm bureaus. Where no county or community organization existed it was agreed that the councils of defense should establish them. Under such circumstances the county agent as a member, generally the chairman, of the food production committee of the county council of defense, personally organized the community councils. As reported by the county agents, there were more than 7,000 community organizations with from 30 to 50 families registered and actively supporting the extension work.

In the North and West the county farm bureaus spread into 29 States and during 1918 increased to 732, with more than 290,000 members. In three other States there were other types of county organizations and in one State committees of the county council of defense acted as the local cooperating parties.

In 1918, as previously, it was necessary to increase the acreage, and if possible the yield, of cereals and the production of animal fats. In spite of considerable decrease in the labor supply, the total area in farm crops was increased by about 11,000,000 acres, and the number of swine was increased from 67,500,000 to 76,000,000. The total acreage of tilled crops increased on the average 6 acres per farm, or about 11 per cent above that of 1914, while the actual production was increased about 5 per cent. In other words, the farmers added more territory than a square 235 miles on a side, or an area about the size of Illinois, to the agricultural resources of the country.

The Department of Agriculture, in cooperation with the Food Administration, determined the food needs at home and abroad, and suggested the needed acreage of wheat for each State. An intensive campaign among the farmers was then carried on within the States, largely through the county agents. The agents kept the farmers informed regarding the needs of the country, assisted them in obtaining the proper supply of seed, and instructed in cultivation and harvesting those farmers who had never grown wheat. In the Northern and Western States the agents induced farmers to plant 4,100,000 additional acres, with an increased production of 45,000,000 bushels, and in the fall of 1918, 2,500,000 additional acres of winter wheat were planted. In the South the acreage of wheat was increased, largely due to the influence of more than 50,000 field demonstrations conducted by farmers under the supervision of county agents.

A difficult situation for extension forces laboring for increased food production in the South was created by the high price of cotton. Nevertheless, the southern farmers responded so well to the appeals of the Government, through the extension forces and other agencies, that there was only a slight increase in the acreage of cotton, while the acreage of wheat, oats, rye, hay, potatoes, sweet potatoes, rice, peanuts, grain sorghums, velvet beans, and other food and feed crops was likewise increased. Extensive campaigns also increased the production of milk cows and other cattle, hogs, and sheep from 3 to 5 per cent.

The general result was that the Southern States more nearly than ever before produced the food required by their people and at the same time kept cotton production at a relatively high level. The economic condition of the southern farmers was thus geatly improved, except in some sections where drought materially reduced crop production (*217*).

In many Northern States the corn situation was serious in the spring of 1918. Due to early fall frost the previous year there was a deficiency of corn fit for seed. The county agents therefore undertook to locate seed corn of high germination, adaptable to the locality where it was to be planted, and to see to its proper distribution among the farmers. By intensive organization and the establishment of numerous testing stations, Iowa was able to take care of its seed-corn problem within the State, but Indiana, Michigan, and Ohio had

to bring large quantities of seed corn from New Jersey, Pennsylvania, and Delaware. The seed stocks committee of the Department of Agriculture assisted in the location and distribution of this seed corn, but the county agents distributed it locally. They supplied 326,622 farmers with enough seed to plant 3,500,000 acres, and through their testing campaign 550,000 farmers tested their seed for germination. In this way sufficient seed was provided to plant 10,500,000 acres. At the same time the agents influenced farmers to increase their acreage of corn for silage and thus to raise more livestock.

In Kentucky and Virginia similar service with seed corn was performed on a large scale by the extension agents.

Owing to severe drought in Texas, Oklahoma, and other Western States, the President of the United States, through the Treasury Department loaned $5,000,000 to farmers for the purchase of seed grain in the fall of 1918. The loans were made through the farm-loan banks, but a representative of the Department of Agriculture took charge of the applications, which in the great majority of cases came through the county agents.

The extension services throughout the South, in cooperation with the seed stocks committee of the Department of Agriculture and State seed committees, located stocks of seed and gave farmers information regarding them. This included wheat and corn, rye, cowpeas, velvet beans, peanuts, soy beans, and other seed crops.

A widespread campaign was carried on in the Northern States to increase production of oats through the treatment of seed for smut. Nearly 100,000 farmers, representing an oat area of 1,800,000 acres, were influenced to use this treatment. There were also campaigns for the prevention of rust in cereals by the eradication of the barberry and demonstrations in the control of diseases of potatoes and other vegetables. In Kansas, North Dakota, Oregon, and Washington there were extensive campaigns to control grasshoppers by poisoning.

Food production was also considerably increased by the products grown in several million home and community gardens, in both rural and urban communities and in Army camps. The public schools and a great number and variety of community organizations participated in this movement, but by far the largest influence was exerted by the extension forces, including the agricultural, home demonstration, and boys' and girls' club agents and the organizations cooperating with them.

An emergency act of Congress, providing $10,000,000 for the purchase of nitrate of soda to be sold to farmers by the Department of Agriculture, was administered by the Bureau of Markets. County agents helped to perfect local organizations for distribution of this fertilizer and did much work in obtaining and transmitting orders and handling other details of the business.

Ten Northern States conducted advisory and demonstration work on drainage. As a result, 1,940 drainage systems were laid out for the drainage of 371,226 acres; power ditching machines were provided, sometimes at State expense and sometimes cooperatively by farm bureaus. In Western States 316 irrigation systems were planned and installed, bringing 280,913 acres under cultivation.

Demonstrations and advice regarding tractors, by the extension agents, led to the placing of 5,432 tractors on farms, either through

purchase by farmers or by loan from public agencies. Extension specialists held tractor schools of two to four days, at which machines were loaned and sometimes demonstrated by manufacturers. Extension agents, North and South, also participated in the inspection of threshing machines and otherwise assisted in the conservation of crops on farms.

CONSERVATION AND UTILIZATION OF FOOD

The burden of promoting the conservation and utilization of food under war conditions fell largely on the women extension agents, though the men did considerable work in these lines. In the 15 Southern States, during 1918, there were 883 white county home-demonstration agents, 175 negro home demonstration agents, 83 white urban agents, and 19 negro urban agents. There were also 13 home-economics specialists and a supervisory force of 15 State agents and 57 assistant State and district agents. These agents worked with clubs of women and girls, usually on a community basis. There were 6,391 clubs of rural women, with a regular enrollment of 325,229 and an emergency enrollment of 1,518,746; 9,028 girls' clubs, with a regular enrollment of 146,102 and an emergency enrollment of 759,373; 1,593 clubs for negro women, with a membership of 37,913; and 1,962 clubs for negro girls, with a membership of 50,995. The emergency enrollment of negro women and girls in the rural clubs was 247,143, two-thirds of whom were women. In the urban work there were 1,179 clubs, with a regular membership of 119,218 white women and 224 clubs with 1,035 negro women. In addition, there were 2,751 poultry clubs, with a membership of 63,481 white women and girls, and poultry work was done by 13,434 negro women and girls. In all, there were 23,096 clubs of women and girls, with an aggregate enrollment of 3,283,669, of whom more than 2,000,000 were women. Many people not enrolled in clubs attended the extension meetings, demonstrations, and exhibits.

While much of the work of the women agents in clubs concerned the production of food in gardens and on farms and enterprises connected with health and a more attractive home and community life, a large part of their war activities aimed at the conservation and utilization of food. The great campaign of 1918 almost doubled the results of the previous year. Under the direction of home demonstration agents 64,604,531 containers were filled with canned fruits and vegetables, and 157,605 with meat and fish; 8,982,787 pounds of fruits and vegetables were dried; and about 1,000,000 gallons of vegetables were brined or pickled in 855 community canneries and 131 community drying plants and in homes. With the cooperation of the dairy division of the Bureau of Animal Industry the care of milk, the making of butter and cheese in the home, and the use of dairy products in the family diet were emphasized. As a result the enrolled women produced 16,507,711 pounds of butter, 939,603 pounds of cottage cheese, and 31,828 pounds of cheddar cheese.

The home demonstration agents of the South and their clubs of women and girls carried on in 1918 a great campaign for conservation. This was done in cooperation with the Food Administration, which determined the materials to be conserved. In 10 Southern

States the State agent in charge of home demonstration work also acted as State home-economics director of the Food Administration.

Beginning with December, 1916, a trained woman, who had been employed by the Bureau of Chemistry in testing mixed flours for baking, was transferred to the Office of Extension Work in the South to give instruction to the home demonstration agents on methods of substituting corn meal, corn flour, rice and rice flour, soy-bean meal, peanut meal, rye and barley flour, sweet-potato flour, potato flour, and other materials for wheat in bread making. Publications on this subject were issued by the colleges, and a widespread campaign was conducted in 1917.

With the increased cooperation of the Food Administration and the use of city extension agents a more thorough compaign was carried on in 1918. A large part of the women of the South were reached with publications, demonstrations, and otherwise. "Many sections of the South, in the spring of 1918, went on a nonwheat basis, and in a number of cases by public and unanimous action surrendered all of the wheat flour in existence in certain counties and shipped it to the Food Administration" (*217*).

The campaign for saving meat by the use of substitutes was carried on by home demonstration agents generally, and they assisted in promoting the saving of sugar and fats. In the sugar campaign both women and men agents worked. The latter emphasized the home production of sirup from sugar cane and sorghum.

In the Northern and Western States the home demonstration forces increased rapidly in 1917–18, until there were 35 State leaders, 153 agents at large, 488 agents in rural communities in 361 counties, and 115 agents in 98 cities. In 5,445 classes intensive training for volunteer leadership was given to 88,041 selected women, and over 10,000,000 people were reached by demonstrations, lectures, visits, telephone messages, fairs, and exhibits. The greatest effort of the home demonstration agents was in the promotion of food conservation and preservation, but in cooperation with the Food Administration the saving of wheat, sugar, and other foods was accomplished on a large scale.

Exhibits of milk and milk products showing its food value, use, and preparation were made in all the Northern and Western States. Demonstrations were given in the utilization of milk in cookery and the care of milk in the home, including use of skim milk for human food. A campaign to promote the use of cottage cheese as a substitute for meat was conducted in cooperation with the dairy division. Many community enterprises for the conservation of food were undertaken, and often demonstration centers were established, to which people might come for advice at all times. In some industrial communities cooked-food centers with foods at popular prices were established. These were partly for the purpose of familiarizing people with unaccustomed uses of food, such as rice eaten as a vegetable, or corn meal prepared in various ways. In connection with the campaign for food preservation 1,522 training schools were held for volunteer workers and conducted by home-economics teachers and selected home makers. At these schools, the latest instructions for canning, drying, storing, and brining of meats, fruits, and vegetables were given to 23,000 women. About 355 canning centers were established in the 33 States. These were in rural and urban com-

munities and among groups of all nationalities. Equipment for drying was installed in many of the canning centers and, in addition, there were 33 drying centers. In these ways enormous quantities of food were preserved. Over 3,000,000 women were reached in the various enterprises of the home demonstration agents.

The boys' and girls' clubs in the Northern and Western States, with more than half a million members, sometimes operating separately under their own county and local leaders, but often in connection with the home demonstration workers, in 1918 canned about 2,000,000 quarts of fruits, vegetables, and meats and preserved 162,523 jars of jelly. In some places fish were canned. Bread-baking clubs demonstrated the use of wheat substitutes, and cooking clubs promoted the use of vegetables and poultry products.

OTHER CONSERVATION WORK

Clothing conservation, on account of the scarcity of wool and the high price of materials, was taught by home demonstration agents in various parts of the country. Demonstrations and instruction in cleaning, dyeing, repairing, and remodeling garments and hats were given to groups of women and girls through visits to homes, exhibits, and in other ways. In nine Northern and Western States, salvage shops were established. In Iowa alone more than 36,000 families became interested in the clothing work, and it is estimated that $337,000 was saved.

Health conservation assumed a larger place in the activities of extension agents, particularly women, during 1918. Much of the work was done in cooperation with the Public Health Service and the Children's Bureau. Instruction and demonstrations were given regarding healthful diets, hot school lunches, care of milk and other foods, home sanitation, destruction of flies and mosquitoes, screening of houses, and other useful practices. More directly, in rural regions where physicians and nurses were few under war conditions, instruction was given in home nursing and the selection and preparation of foods for invalids. The services of home demonstration agents during the influenza epidemic in the fall and winter of 1918–19 were vigorous and highly appreciated by health officials, physicians, nurses, and people generally. Though exposed to great personal danger and often until stricken down by the dread disease, they labored to relieve distress and suffering. They took charge of local emergency hospitals, organized diet kitchens, carried or sent to the sick hot broths and other foods in fireless cookers, and served as nurses and dietitians in hospitals and homes.

In the field of rural economics the war brought increased demands for both men and women extension agents. The county agricultural agents aided by marketing specialists throughout the country assisted large numbers of farmers to organize and conduct marketing associations. In the South special attention was given to cotton grading and marketing and in the North to the marketing of grain, potatoes, and dairy products. Much attention was also given in both sections to the purchase of fertilizers, seeds, and farm machinery. Home demonstration agents and club agents helped women and children to standardize products and to sell large quantities of garden vegetables, canned goods, eggs, poultry, pigs, and

other products. Extension agents also aided the farmers in obtaining laborers through labor exchanges often organized by the agents of farm bureaus or in other ways. In this work they often cooperated with the Boys' Working Reserve, organized by the Department of Labor, or with the Women's Land Army, through which a considerable number of women were temporarily put on farms to assist in making or harvesting crops or in household service. "In some localities business men from towns were organized as 'shock troops' and 'twilight crews' in connection with the grain harvest." An interesting feature of the negro extension work was the organization of the "United States Saturday Service League," intended to influence members of that race to render six full days of service each week during the war. Members signed pledges and had badges and certificates of award. This organization was formed by the Alabama negro agents, but spread into several other Southern States.

Extension workers, both men and women, did much to promote the success of the war loans as they increased in number and required more elaborate campaigning. They also aided materially the thrift campaign of the Treasury Department, exemplified by the sale of war savings stamps. They participated in every Red Cross sale and drive for members, and in the united war work campaign in the fall of 1918. Either personally or through committees formed under their direction they assisted in the administration of the selective service or draft act, with special reference to deferred classification of persons engaged in agriculture, and applications for furloughs from the Army to engage in agricultural work.

For the fuel administration the county agents made surveys of materials used for fuel and obtained lists of fuel dealers and public buildings using coal. They cooperated with the agricultural development department of the Railroad Administration, and made a survey of the price of farm machinery for the Federal Trade Commission.

A large number of surveys and statistical inquiries were made by the county agents for the Bureaus of Plant Industry, Animal Industry, Crop Estimates, Chemistry, and Soils, the Forest Service, and the Office of Farm Management of the Department of Agriculture, and for the War Department, Council of National Defense, and Food Administration.

Meanwhile, the extension forces continued their regular work for the promotion of better agriculture and more satisfactory country life. Their efforts to increase wholesome recreation in rural communities, especially among the young people on the farms, were a factor in relieving the strain of farm life under the growing burdens of the war.

EXTENSION WORK IMMEDIATELY AFTER THE SIGNING OF THE ARMISTICE

After the signing of the armistice there was immediately a cessation of the vigorous campaigns for food production and conservation. The demands of European people for food, however, continued, and the high prices of wheat and other crops and of livestock and cotton caused the farmers to attempt to keep up production on the war scale. The return of many men from the Army

and the closing of certain war industries eased the labor situation to a considerable extent. Problems concerned with the marketing of farm products, purchase of supplies, introduction of good seed, and control of plant and animal diseases and pests made farmers desirous of retaining the services of the county agricultural agent.

The large Federal emergency appropriation was available until July 1, 1919. The problem of appropriations for cooperative extension work for the next fiscal year was taken up promptly at the short session of Congress beginning in December, 1918, with the appropriation bill for the Department of Agriculture. The House Committee on Agriculture held extended hearings, and the question of continuance of the emergency extension fund was fully considered. It was finally agreed that the bill should contain an item of $1,500,000 to be allotted to the States under the terms of the Smith-Lever Extension Act. The practical effect of this arrangement would be to bring the Smith-Lever funds up to the maximum in 1919 instead of in 1922 as the original act provided. The bill carrying this item was introduced in the House January 24, 1919, and passed there February 1. It came out of committee in the Senate February 22, but was among the group of appropriation bills which failed of passage prior to the end of the Sixty-fifth Congress on March 4, 1919. Control of both houses passed from the Democrats to the Republicans, and G. N. Haugen, of Iowa, succeeded A. F. Lever as chairman of the House Committee on Agriculture. This committee reported the agricultural appropriation bill May 26 with the same amount of supplementary Smith-Lever fund, and this item remained in the bill as passed by the Senate June 27. This bill contained an item repealing the daylight saving act. For this reason it was vetoed by the President July 11. The Government continued its work and expenditures without authority of law from July 1 to July 24 when the President signed the third bill, which had been drawn to meet his views on daylight saving. Congress afterwards validated the obligations incurred by the Department of Agriculture during the period when it had no appropriation.

The long period of waiting for the determination of what funds would be available in lieu of the emergency appropriation weakened the position of the extension service. The difficulty was further increased by the confusion which resulted from the break-up of the local branches of the Council of National Defense, the Food Administration, and other war-time agencies. It was only because the farmers in many places appreciated the work of the extension agents and felt the need of their continuance that the system outrode so well the storm which seemed to threaten its further existence. The county agricultural agents throughout the country had been so valuable to the farming people that only in comparatively few counties where financial conditions were unfavorable or the agents had been unsuccessful, were these services dispensed with in 1919. The home demonstration agents did not fare so well. They had in many places been so closely connected with the Food Administration and other war-time agencies that their services were regarded as temporary and naturally to be given up with the close of the war. This was particularly true in the Northern and Western States, where county home demonstration agents with few exceptions were

employed for the first time during the war. Many of them were inexperienced in organization work, and even if they were personally acceptable to the women among whom they worked they did not impress their constituency sufficiently to cause an organized movement for their permanent retention. The city work was so obscured by other agencies that it almost entirely disappeared when the emergency funds were withdrawn.

Owing to conditions following the armistice, only about $4,600,000 of the emergency fund for the fiscal year 1919 was actually expended. In 1920 the supplementary Smith-Lever fund was $1,500,000, and the additional regular Smith-Lever fund was $500,000, making a total additional Federal fund of $2,000,000, which was $2,600,000 less than the Federal emergency expenditures during the previous year. The State, county, and farm bureau, or other local funds were so far increased during the year ended June 30, 1920, that the total funds used by the State extension services that year were approximately but $3,500 less than those of the previous year. However, the expenses of the work had increased greatly so that the number of agents employed was considerably smaller.

The number of counties with agricultural agents June 30, 1919, was 2,246, as compared with 2,435 in 1918; the number of counties with home demonstration agents in 1919 was 1,053, as compared with 1,715 in 1918. The total number of persons on the extension staffs in the States and counties in 1919 was 6,076, as compared with 6,728 in 1918. The number of men in 1919 was 4,112, and of women 1,964. In the 15 Southern States there were 1,301 county agricultural agents in 1,101 counties, 29 directors and State agents, and 79 assistant State and district agents. In the home demonstration work there were 1,050 agents in 799 counties, including 57 agents assigned to cities, 13 State agents, and 82 assistant State and district agents. The negro extension workers numbered 177 men and 257 women.

In the 33 Northern and Western States, in 1919, there were county agricultural agents in 1,106 counties and 45 district agents in 105 counties, with 261 supervisory officers and assistants; 230 permanent county home demonstration agents and 150 county club agents; 530 extension specialists; 839 State agents, assistants and temporary workers, and 33 directors.

The character of extension work had changed materially during the war. It had lost to a considerable degree its educational purpose and had become very largely service work for individuals and organizations, and for the Federal Government. This was necessary under war conditions when everything had to be subordinated to patriotic endeavors to uphold the military operations of the Government. Though not so designated, the county agents were in fact a part of the great governmental organization through which the Nation was striving to win the war. In some respects it was unfortunate that this was not recognized under laws providing for the mobilization of the civil forces acting as essential factors in bringing the war to a successful end.

When the war was over, the economic problems of farmers became so pressing and acute that they needed the extension forces, and particularly the county agricultural agents to continue to give them personal service, not only in matters relating to agricultural produc-

tion but also in the marketing of their products. Problems relating to marketing therefore had a large place in the further development of the agricultural extension system.

GENERAL STATUS OF COOPERATIVE EXTENSION WORK IN 1919

During the period when social and economic conditions were so extensively disturbed by the progress and results of the World War, the United States developed and made permanent a nation-wide system of popular education for farming people in the management and financing of which Federal, State, and county governments and voluntary organizations of farmers cooperated in a new way and on a large scale. The number of farmers actively cooperating in extension work increased from about 100,000 in 1915, to more than 275,000 in 1919, and the number of farm women cooperating in the home demonstration work increased from 6,000 to more than 125,000. In 1915 the enrollment in boys' and girls' clubs was about 250,000, while in 1919 it was about 614,000. From 1915 to 1919 the total funds annually available for the extension work increased from $3,600,000 to $14,600,000. At the end of this period, though the funds were four times as great as they were five years before, their purchasing value was only about two and one-half times as great. The average cost per county for supervision, salaries, and expenses of county agricultural agents was $3,600 in 1919, as compared with $2,600 in 1915. For home demonstration work the average cost in 1919 was over $2,600, while in 1915 it was $1,800. In 1915, 65 per cent of the persons employed in extension work gave their full time and 25 per cent less than half their time; in 1919, 88 per cent were on full time and hardly 10 per cent on less than half time. When the Smith-Lever Act went into effect somewhat over 30 per cent of the agricultural counties had a county agricultural agent, and about 10 per cent had a county home-demonstration agent. On June 30, 1919, over 75 per cent of the counties had a county agricultural agent, and 35 per cent had a county home demonstration agent.

One of the greatest difficulties in establishing and perfecting the extension system arose from the excessive turnover of workers. An investigation in the Northern and Western States showed that the average period of service of county agricultural agents at work July 1, 1919, was a year and 11 months. At that time the shifting character of this force was "chiefly due to unusual opportunities for larger compensation in farming or other pursuits, the competition of counties for the successful agents at advanced salaries, and to the hardships of the service, including such things as long and irregular hours, absence from home, long night trips to meetings, exposure to all kinds of weather, and the like" (*217*).

POSTWAR READJUSTMENT OF EXTENSION ORGANIZATION AND WORK, 1919 TO 1923

It has been seen how the county organizations of farmers supporting the work of extension agents developed under different names and only gradually adopted the term "farm bureau" as their accepted designation. Prior to 1917 there was practically no attempt

to standardize the name and functions of these organizations. That year the county-agent section of the Office of Extension Work, North and West, began a definite movement in this direction, based on the conception that the farm bureau was to be a quasi-public body, constituting a part of the extension organization and formed for the specific purpose of assisting in developing a county program of extension work. In Circular 16 of the Office of Extension Work, North and West (*257*), is the following definition:

A county farm bureau is an institution for the development of a county program of work in agriculture and home economics, and for cooperating with State and Government agencies in the development of profitable farm management and efficient and wholesome home and community life.

In the farm bureau were to be committees on such projects as dairying, livestock, and horticulture. Each committee was to have a county chairman and a member in each of the communities where a project was carried on. These committees would cooperate with the county agent in developing and conducting a county program of extension work. On this basis a form of constitution for a county farm bureau was prepared, which, in its essentials, was adopted by most of the farm bureaus organized after 1916 in the Northern and Western States, but not in New York and Illinois. A model law for State aid to extension work through farm bureaus was presented at the conference of extension directors at the meeting of the association of agricultural colleges at Baltimore in January, 1917. The essential features of this law were incorporated in many of the State enactments for this purpose.

The extension forces took a large share in the organization of farm bureaus in the Northern and Western States during the war and, at its close, the county agents were intimately associated with the activities of the farm bureaus. But influences were operating which were to bring about important changes in the relations between the extension organization and the farm bureaus. The rapid growth in the membership and funds of the bureaus, and their consequent larger share in the financial support of county agents, particularly after the withdrawal of the war-emergency funds, produced a feeling on the part of many farm bureau officers and members that the county agent was essentially their "hired man" who was to do their bidding and perform such service as they desired. They were especially interested in buying supplies or selling products at that time, and the county agent was increasingly called upon to direct these activities.

In the Southern States and elsewhere different farm organizations were working with the county agents, some having little or no participation in their financial support, but everywhere there was a demand that county agents should buy and sell for the farmers. As this was an easy way to get the farmers' good will, many county agents in different parts of the country were engaging in commercial activities. When such business was not carefully conducted, and the interests of dealers were unfavorably affected, they protested and sometimes appealed to the higher extension officials in their own States or at Washington.

A notable early example relating to the purchase of fertilizers illustrates the difficulties arising from the promotion of cooperative buying by farmers, either through their organization which the

county agents had assisted in forming, or directly through the transmission of orders by the agent himself. When the cooperative purchase was made from a wholesale company, the local dealer objected and sometimes made serious trouble for the county agent. When the local dealer was conciliated by giving him a part, with remuneration, in the transmission of the pooled order, the jealousy of the competing companies who did not get orders was aroused, and they appealed to the supervising extension officers to keep the county agents out of such business.

The policy of the Department of Agriculture and, in general, of the cooperating State agricultural colleges, consistently opposed the participation of county agents in commercial transactions for farmers but favored their advising the farmers how to form cooperatives and conduct business through them. As early as April 4, 1916, Secretary Houston, in replying to a complaint of the New York State Retail Feed Dealers Association, said:

> County agents who are paid partially from funds appropriated to the Department [of Agriculture] are prohibited from participating in any way in the transmission to shippers of orders or money for supplies. Upon request, however, they are permitted to give farmers information as to how they may buy directly from wholesalers and manufacturers. They are allowed to conduct correspondence with dealers and commission merchants only with the view of securing information. They have been advised that it is not their function actually to ship or to sell and that they should never agree to do so. All of the county agents have been warned against participating in any way in any of the business transactions of buying and selling supplies for farmers. * * * The department considers it a legitimate function of the county agents to aid the farmers in organizing associations for the cooperative purchase of farm commodities. The agent is expected to assist in an advisory way such associations in purchasing their farm supplies upon the best possible terms.

The extraordinary conditions growing out of the war, and the participation of the United States therein, led the extension forces to do many things which they would not ordinarily do in time of peace. The urgent desire of many farmers to improve their economic condition by cooperative action brought about a general inclination of the county agents to engage directly in the transaction of business for the cooperatives which they had assisted in forming.

It therefore became necessary for the department to define again its position with reference to the participation of county agents in commercial transactions. In the latter part of 1918 the director of the States Relations Service made a definite ruling with reference to this matter. County agents were instructed to confine their activities with cooperative associations to such matters as could fairly be called educational. They might even go to the extent of conducting a demonstration of the organization and operation of a cooperative association, but should leave to the association or its officers all actual business transactions. In commenting on this ruling, W. F. Handschin, vice director of the agricultural extension service of the University of Illinois, in January, 1919, said:

> In the working out of this plan, the farm adviser [that is, the county agent] will be what the name implies, a real adviser to his constituency in working out their problems in distribution, just as he has been in helping them to work out their problems in production. * * * Once the [cooperative] agency is organized and the business established, the farmers themselves or their agent must take charge (243).

When the farm bureau itself engaged in buying or selling for its members, the business was usually confined to comparatively small transactions. In some cases, however, the business became sufficiently large to warrant the employment of a paid agent to conduct it.

As the farm bureaus in a considerable number of States were recognized by law as semiofficial agencies formed to cooperate with the extension service, and in some cases received State appropriations with that understanding, many of their leaders saw the inexpediency of their engaging directly in commercial activities. In general, therefore, the farm-bureau policy was to make this organization of general service to agriculture and country life, including especially educational work in cooperation with the agricultural colleges and the United States Department of Agriculture. To meet the demand of the farmers for aid in buying or selling, the farm bureaus quite generally were active in the formation of cooperatives and supported them strongly.

The farm bureaus also became interested in legislation. At first their endeavors were largely confined to initiating or perpetuating State laws relating to the extension work and their connection with it, or to promoting liberal Federal appropriations for this work. Sometimes they aided in getting State appropriations for agricultural colleges, schools, or experiment stations. Gradually their legislative activities were broadened to include matters relating to cooperative marketing, transportation, and affairs in other fields not originally contemplated but outside the accepted functions of the extension forces.

DEVELOPMENT OF STATE FARM BUREAU FEDERATIONS

As the number of farm bureaus and county agents increased and their relations with the extension service became more complex, the State leaders began to invite representatives of the farm bureaus to attend the annual conferences of county agents at the agricultural colleges, which by 1918 had become a regular feature of the extension work. Sometimes these conferences were held in connection with farmers' week at the college. Then there would be many farm-bureau members from different parts of the State in attendance at the county-agent meetings.

The practice of inviting farm-bureau representatives to hold meetings in connection with the extension conferences was begun in Vermont in October, 1914. At this meeting there was discussion of local problems of farm-bureau administration, including the obtaining of members, county financial support, and farm-bureau assistance of county agents in carrying on demonstrations and in the determining of projects. A similar meeting was held at the New York College of Agriculture, November 19 to 21, 1914. In February, 1915, at the Illinois State conference of county agents, farm-bureau officials from each county attended. California, Idaho, Minnesota, Utah, and West Virginia, held similar meetings a little later. In California, Idaho, and Utah, itinerant conferences of extension agents and farm-bureau delegates were held. March 24–25, 1915, the Missouri Association of Farm Bureau Boards was formed at a meeting held at Slater, in Saline County. This organization planned to hold an annual meeting at the agricultural college during farmers' week. In

connection with the initial meeting of this association, State Leader Doane said "when a number of States have demonstrated the usefulness of such an organization as this a sectional or even a national association might be useful."

The Massachusetts Federation of Farm Bureaus and County Leagues was organized at Worcester, May 11, 1915, "to promote the efficiency of the respective farm bureaus and county leagues by means of conferences and cooperation to determine a concerted program and policy of the leagues and farm bureaus and in general to further through them the welfare of the Commonwealth of Massachusetts."

In 1916 some of the farm bureaus in Illinois undertook a more elaborate enterprise which was to have a far-reaching influence on the status and work of such organizations throughout the United States. At a special session of farm-bureau representatives and county agriculturists, that is, county agents, at the Illinois College of Agriculture, January 26, 1916, due to the initiative of Herman W. Danforth, of Tazewell County, the formation of a State federation of county agricultural associations was considered. Howard Leonard, of Eureka, moved that a committee of five (including two county agents) be appointed to consider and report on the formation of such a federation. W. G. Eckhardt, the agent in De Kalb County, suggested that county agents should not be included and Dean Davenport moved that the agents should act in an advisory capacity only. The committee suggested a choice among three names for the federation, (1) Chamber of Agriculture of Illinois, (2) Illinois Agricultural Society, (3) Illinois Society of Farm Bureaus. It was voted to form the Illinois Agricultural Association, the object of which should be "the improvement of agriculture." The members of this association would be the county agricultural associations, represented by their presidents and secretaries or other delegates selected by their executive committees. The annual dues for each county association would be $100. On this basis a temporary organization was effected with H. W. Danforth as president and Howard Leonard as secretary. This organization was made permanent March 15, 1916, when Mr. Danforth was continued as president and Mr. Leonard was made treasurer. A constitution was adopted and signed by representatives of 11 counties. The objects of the Illinois Agricultural Association were declared to be:

To promote the general interests of agriculture by studying the methods of production and distribution of farm products with the view of working out a system of greater economy and efficiency in handling and marketing the same; to encourage the production, marketing, and distribution of livestock, to encourage and promote the cooperative organization of farmers and of those engaged in the secondary industries or mutually helping in a more efficient organization of the business of agriculture; to publish and issue when deemed advisable, reports, bulletins, and instructions generally which will help in spreading knowledge of the best means of rural betterment and organization; to effect a system of effective cooperation between the several county farm bureaus throughout the State for "better farming, better business, and better living"; to encourage and cooperate with educational institutions, departments, societies, and the several local organizations in all efforts to solve the questions relative to rural betterment and agricultural science; to cooperate where necessary in the purchase of seed, fertilizers, and such other commodities as may from time to time seem necessary and advisable; to make a thorough study of all legislative matters and use our influence in securing the enactment of wise legislation and the defeat of unwise legislation. In short, the Illinois Agricultural Association is formed for the purpose of promoting cooperation between the

several county farm bureaus of the State and the members of such bureaus, increasing their efficiency and extending their usefulness. It is intended to secure cooperative action in advancing the common purposes of its members; uniformity and equity in business and laws and proper consideration and concentration upon questions affecting the financial, commercial, and civic interests of the State (249).

The membership was to consist of "county farm bureaus and better farming associations * * * employing a county agent or adviser under the provisions of the Smith-Lever Act and complying with the provisions thereof." Each county organization was entitled to two voting delegates to be selected by the farm bureaus, and to be entitled "directors." County agents were not eligible for appointment as directors. A secretary was to be appointed by the board of directors. The dues for each county bureau member were fixed at $100. Standing committees of three members were provided: (1) Executive committee, (2) organization, and (3) education. The latter was to act in conjunction with the United States Department of Agriculture and the University of Illinois.

It is significant that when the next meeting was held, June 19, 1916, legislative matters were the principal business. Federal grain inspection and bill of lading bills were favored, as were Illinois bills for pure seeds, collection of taxes by county treasurers, and appointment of farmers and stockmen, with a veterinarian on the livestock commission.

A legislative committee was appointed and was the only committee which reported at the annual meeting on March 31, 1917. At that time only five counties had paid their dues. This led to a reduction of dues to $50, but in 1918, when 23 counties had joined the association, they were raised to $100, and a year later, under the leadership of W. G. Eckhardt and C. V. Gregory, $5 from each member of the county farm bureaus was required. A purchasing committee was appointed, which in 1917–18 bought 23,000 tons of phosphate and large quantities of seed of clovers, alfalfa, timothy, soy beans, and rape, and 30 home-canning outfits. The business of the association grew rapidly after its reorganization in 1919. As early as July 6, 1917, Professor Handschin advised the employment of a secretary on full time. In January, 1919, the executive committee was authorized to employ D. O. Thompson in that capacity for three years at a salary of $10,000 a year, and a permanent office was located in Chicago. The executive committee, which had been enlarged to 13 members, met about once a month. Campaigns for members brought large numbers of farmers into the county farm bureaus, and this greatly enhanced the income and the importance of the State organization.

In 1920 the association had 50,000 paid members and assets of $574,000. A year later there were 106,413 members, but the agricultural depression reduced this to less than 70,000.

Thus was built up a strong State federation of farm bureaus, whose operations ran parallel to the educational activities of the extension service of the agricultural college, while the cooperation of that service was limited to the county farm bureau.

In New York, where the farm bureaus were by law clearly recognized as semiofficial agencies, M. C. Burritt, State leader of county agents, strongly favored a State organization. Under the influence

of his leadership during farmers' week at the State agricultural college, February 12 to 17, 1917, 34 county farm bureaus, representing about 40,000 farmers, sent delegates to a meeting at which they organized the New York State Federation of County Farm Bureau Associations. The purpose of this federation was broadly educational. It did not conduct commercial transactions, but fostered the organization of commodity associations, such as the dairymen's league.

Early in 1917 the Office of Extension Work, North and West, attempted to guide the movement for the formation of State farm bureaus by formulating a constitution for such organizations. This was based on its plan for county farm bureaus. The objects and program of work of the State farm bureau were defined as follows:

> The objects of this organization shall be to develop, strengthen, and correlate the work of the county farm bureaus in their efforts to promote the development of the most profitable and permanent system of agriculture; the most wholesome and satisfactory living conditions; the highest ideals in home and community life; and a general interest in the farm business and rural life.
>
> The objects of this organization shall be effected through the adoption and promotion of a definite State program of work. This program shall be based on the results of a careful study of the programs of the county farm bureau. It shall be formulated and directed by the executive committee of the State farm bureau in cooperation with the Director of Extension of the State Agricultural College or such person or persons designated by him.

Provision was made for project committees with members in the counties carrying on the respective projects. These committees were to assist in formulating and carrying on the State program of work. Features of this constitution were adopted by a number of the State farm bureaus, but usually their functions were defined more broadly.

In January, 1917, Nat. T. Frame, State leader of county agents in West Virginia, called a meeting of farm-bureau delegates at the agricultural college during farmers' week, to discuss the organization of a State federation of county farm bureaus. An organization committee was appointed, with instructions to report the next year. They drafted a constitution for a State federation, and this was adopted in January, 1918.

In Iowa, through the participation of the extension forces under war conditions in the campaign to create farm bureaus, there were such organizations in all the 99 counties of the State by July 1, 1918. In the fall of that year the board of directors of the Polk County Farm Bureau voted in favor of a State federation, and about the same time Marshall County took similar action. A little later, President Justice, of the Polk County Farm Bureau, and President Howard, of Marshall County, sent letters to the other farm bureaus urging the formation of a State federation. This resulted in a meeting of farm-bureau presidents at Des Moines, after which the presidents of Polk, Marshall, and Wright Counties called another meeting at Marshalltown, December 27, 1918. At this meeting 70 counties were represented, a constitution and by-laws for a State federation of county farm bureaus were adopted, and an executive committee of 11 was appointed. On this committee were J. R. Howard and Frank Justice. The committee elected Mr. Howard president, and J. W.

Coverdale, who had been State leader of county agents, was made secretary.

The constitution provided that the State extension director and the State leader of county agents should be advisory members of the executive committee without the right to vote.

The object of the federation shall be to effectively organize, advance, and improve in every way possible the agricultural interests of the great commonwealth of Iowa economically, educationally, and socially, through the united efforts of the county farm bureaus of the State (*229*).

Committees on (1) marketing and transportation, (2) education, and (3) legislation were provided. The officers and committees cooperated with the extension service and had meetings with the extension specialists. Through the influence of the agricultural college, the Iowa federation pursued a somewhat conservative course with reference to marketing and legislation.

In Ohio, during farmers' week at Ohio State University in 1918, representatives of 26 farm bureaus made plans for a State federation (*220, 268*). On January 27 and 28, 1919, delegates from about 70 counties formed this federation and adopted a constitution and by-laws. O. E. Bradfute was elected president and H. C. Rogers, secretary. The federation expressed a desire to cooperate with other agricultural organizations in the State and favored a national federation. Mr. Strivings, president of the New York Farm Bureau Federation, described the organization and work of that federation.

Some of the chief interests of the Ohio federation were outlined at its next meeting held at Columbus September 16, 1919, when it was resolved that the federation should contract for bulk necessities required by its members and should find a market for their products. Legislation on several matters was recommended. Women should be represented on the executive committee of county bureaus, and matters of special interest to them should be presented monthly in the farm-bureau news. The federation should promote the betterment of farm homes and encourage the appointment of county home demonstration agents.

The Michigan Farm Bureau (*223*) was formed by delegates from 60 counties at a meeting at Lansing, February 4 and 5, 1919, in connection with the farmers' week at the State agricultural college. Its object, as stated in its constitution, "shall be to encourage, aid, and correlate the efforts of the county farm bureaus and to provide ways and means for associated action in the solution of agricultural problems of State and national scope." It was divided into the following departments: (1) Cooperation with other organizations, (2) soils, (3) fruits and vegetables, (4) livestock and poultry, (5) dairying, (6) buying and selling, (7) farm management, (8) boys' and girl's clubs, (9) the farm home, (10) legislation, and (11) publicity. Every farm-bureau member was to be a member of the federation. Its executive committee was composed of persons representing each department. Among the members of the first executive committee were Mrs. J. C. Ketcham, representing club work, and Miss Jessie Buell, the farm home. Roland Morrill, of Benton Harbor, was president and C. A. Bingham, secretary.

The Michigan federation was especially interested in buying and selling. This affected the county farm bureaus and for a time

practically forced the county agents to engage somewhat in commercial activities. In the constitution of the State federation as revised at the annual meeting, February 5 and 6, 1920, the plan of buying and selling was elaborated to include grading, packing, marketing, advertising, renting or buying buildings and equipment, and operating warehouses, elevators, creameries, mills, canning, drying and pickling plants, and other cooperative industries. A grain and seed purchasing and selling department and a traffic department were established. Much attention was given to problems connected with sugar-beet contracts. Among the legislative measures favored was the restriction of speculation in food products. Compulsory military training was opposed. Each county was to have one voting delegate and, in addition, one for each 500 paid members above the first 500. The executive committee was reduced from 11 to 6 members with a two-year term. Members of the State board of agriculture, and of the Michigan Agricultural College board, were privileged to sit on the committee on education. A campaign was undertaken to obtain members on the basis of $5 annually for the State federation, and $5 more for the county farm-bureau membership.

The Indiana Federation of Farmers' Associations (*267*) was organized at a convention held at Indianapolis, March 25, 1919, at which about 400 delegates were present. D. O. Thompson, secretary of the Illinois Agricultural Association, described that organization and its work. The constitution adopted for the Indiana federation (*250*) included the following objects: (1) To promote the general interest of agriculture by studying the methods of production and distribution of farm products with a view to working out a system of greater economy and efficiency in handling and marketing the same; (2) to encourage and promote the cooperative organization of farmers and those engaged in the secondary industries; (3) to issue publications and instruction generally; (4) to effect a system of cooperation between the county farmers' organizations; (5) to encourage and cooperate with educational institutions, societies, and local organizations, in efforts to solve questions relative to rural betterment and agricultural science; (6) to cooperate in the purchase of seeds, fertilizers, and other materials; (7) to study legislative matters and use influence for wise legislation and against unwise measures, and (8) to affiliate with similar organizations and be an auxiliary to a national organization.

There was to be a director for each township and one delegate for each 50 members who had paid an annual fee of not less than $2. Within a year 60 counties had joined the federation. John G. Brown was the first president of the Indiana federation, which was conducted on comparatively conservative lines. It issued a journal called, at first, the Organized Farmer, and afterwards, the Hoosier Farmer.

THE AMERICAN FARM BUREAU FEDERATION

By the time the nine State farm-bureau federations, described above, were well organized and in active operation, several other States were undertaking or contemplating similar organizations. There was sufficient sentiment among the farm bureaus in different

parts of the country in favor of a national federation to warrant a definite movement in that direction.

In response to an invitation by S. L. Strivings, president of the New York State federation, representatives of 12 States met at Ithaca, N. Y., February 12, 1919. Mr. Strivings called the meeting to order and stated that it was proposed to form a national federation for the following purposes:

(1) To provide the Nation with some sane organizations thoroughly representative of agriculture throughout the entire United States, which might speak for the farmers of the entire country; (2) to take advantage of a nation-wide organization—the farm bureau—which promies great possibilities of usefulness in developing a program which will reach the entire country and which will bring into action the strongest farmers of the country (*253*).

C. B. Smith, chief of the Office of Cooperative Extension Work, North and West, pointed out that although about 800 counties had farm bureaus, hardly 400 of them were well organized and working actively. Therefore something should be done to "get real local associations established in every county." This was a large undertaking in which a national organization might help. After considerable discussion—

a committee was appointed to outline a plan of procedure designed to effect a national organization. This committee recommended that a meeting be held at Chicago on November 12 and 13 to perfect such an organization and that in the meantime unorganized States should be urged to form State federations of county farm bureaus (*253*).

With this understanding, the Ithaca meeting adjourned, leaving to the organization committee, consisting of O. E. Bradfute, of Ohio, Chester H. Gray, of Missouri, E. B. Cornwall, of Vermont, J. C. Sailor, of Illinois, and Frank M. Smith, of New York, the task of making arrangements for the Chicago meeting. This committee drafted a tentative constitution for a national federation of State farm bureaus. Widespread interest in this proposition was created throughout the country. States which had any kind of county organization resembling a farm bureau in its functions hastened to form a State organization, even though the number of active county units was small. There was much discussion in the agricultural press and elsewhere regarding the objects and value of a national organization of farmers based on the county farm bureaus, which thus far had been chiefly engaged in educational activities in cooperation with the extension services of the agricultural colleges and the United States Department of Agriculture. Economic conditions, however, had caused many farm bureaus, especially in the Middle West, to engage in marketing activities. The benefits of cooperative marketing of farm products had been urged with great success in a number of States as the chief reason for membership in farm bureaus. The States where farm bureaus were most rapidly increasing their membership were keeping this motive well to the front.

On the other hand, the broad educational advantages of county farm organizations closely linked with the cooperative extension service appealed strongly to thoughtful farm men and women in many localities. In his book on the Farm Bureau Movement, O. M. Kile had described the result of the discussion of the objects of a national farm-bureau organization.

The argument as to whether the prospective organization was to be primarily educational or whether it should be designed specifically to bring about improved business and economic conditions, increased as the date for the convention approached. In general the Eastern, Southern, and Western States championed the former view, while the Middle West (which was more completely organized and farther advanced in State farm-bureau activities) insisted upon the business organization idea (253).

The Office of Extension Work, North and West, through its section on county-agent work, favored a national organization of farm bureaus based on the same general plan which it had advocated for the county and State farm bureaus. Foreseeing that the formation of the State farm bureaus would lead to a movement for a national organization it had formulated in 1917 a constitution for a national farm bureau. This was—

> To develop, strengthen, and correlate the work of the State farm bureaus * * * through the adoption and promotion of a definite national program of work. This program shall be based on the results of a careful study of the programs of the State farm bureaus. It shall be formulated and directed by the executive committee of the national farm bureau in cooperation with the director of the States Relations Service of the United States Department of Agriculture.

This suggested constitution was called to the attention of the organization committee prior to the Chicago meeting.

Approximately 500 delegates and visitors from about 30 States attended the meeting at Chicago, November 12 and 13, 1919. Of these, 220 were from Illinois, 32 from Iowa, 16 from Indiana, and from 1 to 8 from other States. It was decided to have one voting delegate from each of the States represented. There was much discussion regarding the objects of a national federation, as to whether it should deal chiefly with agricultural business and legislation or be for the most part an educational association.

The name to be given the national organization also was the subject of discussion. The Illinois delegation proposed to call it the national farmers' association. It was also suggested that the South would not be inclined to join in a farm-bureau federation since other forms of county associations were prevalent there.

A spirit of compromise finally prevailed, and a temporary organization and constitution were adopted. James R. Howard, of Iowa, was elected president, S. L. Strivings, of New York, vice president, and J. S. Crenshaw, of Kentucky, treasurer. The constitution made the name of the organization the American Farm Bureau Federation. Its objects were—

> to correlate and strengthen the State farm bureaus and similar State organizations of the several States in the national federation, to promote, protect, and represent the business, economic, social, and educational interests of the farmers of the Nation, and to develop agriculture (253).

Membership in the national organization was limited to State farm-bureau federations or similar organizations approved by the executive committee. Each State was to have one director and one additional director for each 20,000 members in the State. These directors were to hold annual meetings and elect for one year the president and vice president, and an executive committee of 12 members, arranged in groups of 3, representing respectively, the East, South, Middle West, and West. The president was to be an ex officio member of the executive committee and its chairman. The Secretary of

Agriculture and the director of the States Relations Service were given the privilege of participating in the meetings of the executive committee, but were not entitled to vote. Under this provision the writer, as director of the States Relations Service, often attended meetings of the executive committee up to 1923.

A house of delegates, made up of one delegate from each State and one additional delegate for each 10,000 farmers of the State, was to sit with the directors at the annual meeting and take part in the discussions but have no vote.

Any officer or director of the American Farm Bureau Federation who shall become a candidate for an elective or appointive State or national office, shall at once resign and be automatically dropped from his official position in the American Farm Bureau Federation (*253*).

Each State farm bureau was to pay annually to the national organization 10 per cent of the dues paid by members of the county farm bureaus, or a lump sum of from $250 to $1,000 to be fixed by the executive committee.

The constitution was to become effective when ratified by 10 States.

A meeting to make a permanent organization of this national federation was called for March 3, 1920, at Chicago.

A large number of resolutions dealing with marketing, legislation, and other matters of general interest were adopted. And the educational relations of the federation were expressed as follows:

Believing that the strength and origin of the American Federation of Farm Bureaus have been achieved through cooperation with the State and Federal Departments of Agriculture, upon a sound educational program, we declare it to be our purpose to continue such cooperation in the future, and that neither business enterprise nor legislative activity should diminish such cooperative educational activities. * * * Where service is needed and actually rendered we favor appropriations adequate to meet that service. We commend the extension work of the Department of Agriculture, through the land-grant colleges of the several States (*226*).

At the second Chicago meeting of the federation 28 States ratified the constitution, which was amended to make it obligatory on each State federation to pay annually to the national federation 50 cents for each member enrolled in the county farm bureaus. Difficulties in carrying this out were encountered, but the income of the national organization rose from $137,344 in 1920 to $241,442 in 1921.

The executive committee was instructed to organize departments of transportation, trade relations, distribution, statistics, legislation, and cooperation. Mr. Howard was reelected president. It was decided to establish a legislative office at Washington, with Gray Silver, of West Virginia, in charge.

The American Farm Bureau Federation developed its work rapidly and broadly. An intensive campaign for increased membership was made, largely with the aid of solicitors paid by the State and national federations. This was so successful that, at the annual meeting held at Atlanta, Ga., November 21 to 23, 1921, the secretary reported that there were 46 State federations (not including Pennsylvania and South Carolina), 1,486 county farm bureaus, and 967,279 members. The county fees ranged from $1 to $15, and 27 States had a $10 membership fee. Almost all the agricultural counties in New England, Arizona, California, Delaware, Illinois, Indiana, Iowa, Michigan, Minnesota, New Jersey, New York, Nevada, Ohio, and Utah had farm bureaus. In the Southern States only

Georgia, Kentucky, Texas, and West Virginia had any considerable number of county farm bureaus.

The objects and program of the American Farm Bureau Federation in 1921 were summarized by Mr. Kile as follows:

GENERAL

1. To develop a completely unified national organization to act as spokesman for the farmer and to adequately represent the farmer and the farmer's interests on all occasions.

EDUCATIONAL

1. To create in the urban mind a better conception of the farmer's relationship to other units in the social and economic structure.
2. To reëstablish agriculture in the public mind as the foremost industry, on which all others depend, and in the prosecution of which man reaches his highest plane of development.
3. To encourage and assist in the development of food production to its highest state of efficiency.
4. To foster and develop all those lines of endeavor which make for better homes, better ocial and religious life, better health, and better rural living in every sense.
5. To conduct referenda on various national questions to determine farm sentiment before determining legislative action.

LEGISLATIVE

1. To safeguard the rights and interests and to assert the needs of the farmer whenever occasion may arise.
2. To establish without question the legality of collective bargaining.
3. To insist upon the presence of "farmer minds" on all boards and commissions affecting agriculture, appointed by Congress or the President.
4. To defend the farmer's viewpoint in all matters relating to tax levies, tariffs, currency, banking, railways, highways, waterways, foreign markets, the merchant marine, territorial acquisitions and all similar legislative matters involving questions of policy, in any way affecting agriculture.
5. To insist on some arrangement between capital and labor which will insure freedom from disrupting and criminally wasteful strikes.
6. To strengthen the Federal Farm Loan Act and secure in addition, the establishment of a system of personal credits.
7. To demand the regulation, under government supervision, of all commercial interests whose size and kind of business enables them to establish a monopoly dangerous to the best interests of the Nation.

ECONOMIC

1. To extend coöperative marketing of farm crops to the point in the distribution system that the maximum benefits are secured for the producer, and incidentally, for the consumer.
2. To limit the profits and reduce the costs of distribution in all lines not handled coöperatively.
3. To so estimate the effective world supply of any farm product and to so regulate the flow to market as to eliminate sharp and extreme price fluctuations.
4. To establish new foreign markets for surplus American farm products.
5. To provide cheaper sources of fertilizer and more economical means of production (*253*).

RELATIONS OF THE DEPARTMENT AND AGRICULTURAL COLLEGES WITH FARM BUREAU FEDERATIONS

While the State and national federations had no cooperation with the Federal and State cooperative extension services which involved joint enterprises or the mingling of funds, yet the widespread operations, particularly the membership campaigns of the federations,

affected the activities of the county farm bureaus and often tended to cause extension agents to go beyond their proper functions as public officers. In certain quarters it was held that the primary obligation of the county extension agents was to the farm bureaus.

It was therefore necessary for the department and college officers in charge of business relating to the cooperative extension work to give much attention to the relations between the extension agents and the farm bureaus and their federations.

At the meeting of the Association of American Agricultural Colleges and Experiment Stations at Chicago, Ill., November 12 to 14, 1919, at the very time that the American Farm Bureau Federation was being formed in that city, there was a discussion of these matters in papers presented by M. C. Burritt, of New York, W. F. Handschin, of Illinois, W. A. Lloyd, of the States Relations Service, and S. L. Strivings, president of the New York Farm Bureau Federation. Mr. Burritt defined the proper relation between the public extension agencies and the county farm bureaus as a partnership, involving the joint formation and conduct of a program mutually agreed upon and the cooperative employment of the county agent, for whose support both parties supply funds, to carry out this program. In the North and West 21 States agreed substantially on the definition of a State farm-bureau association as—

> an association of some or all of the county farm bureaus (associations) of the State, usually represented in the federation by a delegate or delegates, formed for the purpose of seeking collectively the solution of important production, marketing, and general economic and social agricultural problems which the county bureaus individually are trying to solve (*230*).

Iowa offered the following definition:

> A State farm-bureau federation is an association of several or all of the county farm bureaus of the State which is officered and financed entirely by the farmers for the purpose, first, of collectively seeking a solution of problems of a state-wide or national nature, such as transportation, marketing, legislation, etc., which the individual farm bureau can not because of its size and the source of its funds undertake, and, second, of assisting the county farm bureaus in their various educational projects which are being carried on in cooperation with the State agricultural college and the United States Department of Agriculture (*230*).

Mr. Burritt believed that both the State and the national federation should have "a vital program which must be primarily educational in character" and

> that this program should be one of building up and strengthening the farm-bureau organization, beginning with the local county units of the best farmers, for the primary purpose of carrying out a constructive educational program for the improvement of agriculture, in which there will be utilized every facility of science and practice, including a partnership with the public agricultural institutions, in carrying forward the program (*230*).

Mr. Handschin said that in Illinois the county farm bureau is "a county-wide organization of farmers having for its object the improvement of agricultural and rural life in all its various aspects. * * * Its program includes both educational work and almost any form of service required by the farmers" (*242*). One of the chief lines of work has been the employment of a county agricultural agent, who is, to a large extent, a public servant and primarily an educator. His legitimate functions are hedged about by certain limitations and, as his salary and expenses are paid at least

in part from public funds, he can not legitimately engage in purely commercial transactions, though he may take a large part in developing cooperative marketing associations. "The college has no technical or official connection with the State federation" of farm bureaus, but hopes for its support in carrying out the college program for the maintenance of soil fertility and other matters resulting from research, and in securing funds for the educational and research work of the college.

Mr. Lloyd did not discuss the relation of the county farm bureaus to the State or national federations, but pointed out that the county agent, as the joint employee of the farm bureau, agricultural college, and Department of Agriculture, should, for good administrative reasons, be supervised by the college "in pursuance of definite plans agreed to with the other two partners in the firm" (*260*).

Mr. Strivings said that the county associations, uniting with the college and the department in the employment of a county agent to carry on educational work, may also "engage in commercial activities which are quite outside the province of the county agent or of the Federal or State cooperating agencies." "State federations are mass formations for state-wide action upon broad agricultural policies which have to do with problems touching the interests of agriculture as a whole" (*272*). They should be on terms of intimacy with the college, which may supply them with plans for economic study and furnish expert advice.

Congress recognized the cooperative relations of the extension service with the county farm bureaus or similar organizations and made a definite provision for the handling of funds contributed by such organizations in the appropriation act for the Department of Agriculture for the fiscal year ended June 30, 1920, as follows:

> That hereafter [which makes it permanent legislation] in carrying on the activities of the Department of Agriculture, involving cooperation with State, county, and municipal agencies, associations of farmers, individual farmers, universities, colleges, boards of trade, chambers of commerce, or other local organizations or associations of business men, business organizations, and individuals within the State, Territory, District, or Insular possession in which such activities are to be carried on, moneys contributed from such outside sources, except in the case of the authorized activities of the Forest Service, shall be paid only through the Secretary of Agriculture or through State, county, or municipal agencies, or local farm bureaus or like organizations coöperating for the purpose with the Secretary of Agriculture.

The attitude of the Department of Agriculture toward the relations of the extension organization with the farm bureaus was summarized by the director of the States Relations Service in a letter to T. P. Cooper, dean of the University of Kentucky, July 27, 1920, as follows:

> The direct cooperation of the colleges and the department should be with county farm bureaus, but even this should extend only so far as the work is educational and comes under approved projects for extension work. The relation of the colleges and the department with the State and national federations of farm bureaus will naturally be those of friends who are engaged in a common cause, but are not responsible for each other's activities. These may involve many advisory and helpful relations (*274*).

The rapid growth of membership in the farm bureau, the aggressiveness and sometimes extravagant claims of some of the promoters of the State and national federations, and the broad activities of

some State federations and the national federation in the field of legislation and cooperative marketing, aroused the antagonism of certain farm organizations and commercial bodies. This led to an increasing number of complaints to members of Congress and the Federal administration that the close relations of the extension forces with the farm bureaus involved an unfair discrimination against other farm organizations and an unwarranted use of public funds. Considerable excitement was caused by a statement sent out about January 1, 1921, by Mr. Howard, as president of the American Farm Bureau Federation, entitled "A New Year's Message to the County Agents."

The county agent is the keystone of the federation. The architects of a great and enduring farmers' organization builded to the eternal glory of America will never forget the importance of that keystone.

The American Farm Bureau Federation is exactly what the individual county farm bureaus make it. And the county farm bureau, I have found again and again and again, is just what the county agent makes it. Show me a weak, listless, ineffective county farm bureau and I will show you behind it a weak, listless, ineffective county agent—one of these harmless, meek, milk-and-water fellows forever reiterating that "this is your bureau, members, and I am your agent; please tell me what to do so that you will continue to pay my salary." My point is that the county agent is set in positive position of leadership, whether he will or not. He can no more escape the responsibilities of leadership than can a line officer in the Army. When the farmers find that they are investing their money in a hired man instead of a leader, they begin to regret that they pay him a leader's salary instead of a hired man's wages.

I would urge every county agent in America to assume a position of real leadership in his county and to stand or to fall on his record as an organizer of farmers into a strong and effective county farm bureau. With strong county bureaus fired with a burning zeal for agricultural justice our movement will challenge the admiration of the world.

The county agent is the strong right arm of the American Farm Bureau Federation. I have found that by use the right arm retains and increases its power. We intend to make increasing use of the county agent. Therefore, we earnestly solicit his constant cooperation. Ask him to continue to help the American Farm Bureau Federation so that the American Farm Bureau Federation may help him and his people (*275*).

About the same time, W. A. Lloyd, of the States Relations Service, sent New Year's greetings to the extension agents in the North and West, in the form of a statement commemorating "10 years of organized county agricultural extension work." This contained the following paragraph regarding the relations of the county agents and the farm bureaus:

The county agent and the county farm bureau are the Broome County twins. The two ideas—or are they only one—were born and grew up together. The county agent has been the John the Baptist of the farm-bureau movement. Without him it would never have existed and without him it is doubtful if it could longer endure. The "agents" have done many things to commend themselves to public esteem, but nothing probably greater than the unselfish devotion they have given to their brother, the county farm bureau. For years it was doubtful if it would live, for it was a sickly and rather unpromising infant; but, the brotherly love of the county agent pulled it through and to this, more than to all else, is due its present lusty growth and the promise of a vigorous and useful life (*275*).

Then there was the paper on "Cooperation of agricultural forces," which C. B. Smith, of the States Relations Service, read at the annual State conference of extension workers, held at Purdue University, Ind., and sent out to the agents in the North and West,

December 28, 1920. In this paper he said that the farm bureau is "practically a public institution, developed at the direct suggestion of agents of Government for the purpose of creating a channel through which the practical results of research work of Government might with certainty reach the people for whom it was intended."

The officers in the State and national organization are in considerable degree farm-bureau presidents, or drawn from the extension staff of the State colleges and National Government.

President J. R. Howard, of the national federation, was formerly president of a county farm bureau, then president of the State federation. John Coverdale, formerly county-agent leader in Iowa, was selected by the federation as secretary of the national association. Mr. C. E. Gunnels, assistant secretary of the federation, has been successively county agent, county-agent leader, and extension director in one of the big Central States, and assistant chief of the Office of Cooperative Extension Work North and West in Washington before taking up work with the national federation. Doctor True, as director of the States Relation Service, is a nonvoting member of the executive committee of the national federation, and the extension director and county-agent leader of practically every State is on the executive board of the State federations. There is every reason, therefore, for the closest kind of cooperation by the extension forces of the States and National Department of Agriculture with the State and national farm bureau federations. * * * And above all they are lending the weight of their influence and directly aiding the Federal Government and the State colleges of agriculture in promoting county farm bureaus as extension institutions in every county of the United States. That is why we believe in them and want to see them grow.

The county farm bureau is not just another farmers' organization. It is essentially a new public institution come into existence.

All farmers, regardless of their affiliation with any other organizations, can support the farm bureau just as they can support their public schools, and with the same assurance that it will contribute to the public good and will in no way supplant any other farmers' organization.

The farm bureau is a type of farmers' organization which differs from all others in many respects. It was not created to meet a special emergency or to correct any injustice, but as a sound, deliberate, constructive movement to promote agriculture, home and rural life, to make farming an efficient and profitable business, rural home life fuller and richer, and to improve the community life of the country as a whole.

The State and national farm-bureau federations are created to further these same purposes in a still larger way and are able to do this because of their origin, intimate knowledge of extension work, and freedom of action; and to my mind are functioning essentially as teaching institutions or chambers of agriculture, giving direct and substantial aid to the State and National Governments in promoting extension work (*275*).

Another matter which was attracting some attention at this time was the attempt to form a national organization of county extension agents supported by State organizations. This movement had begun through the informal assembling annually of a considerable number of county agents at the International Livestock Exposition at Chicago. It happened that the president of this organization was a county agent in Illinois, and kept in rather close touch with the American Farm Bureau Federation, and at times was present at the meetings of its executive committee. An impression was thus created that this movement was intended to loosen the ties which bound the county agents to the agricultural colleges and to make them more decidedly helpers of the farm bureaus and their federations.

The creation and active functioning of the Washington office of the American Farm Bureau Federation, as well as the operations of similar offices maintained by other farm organizations, was a source of irritation to Congress. This, combined with the allegations re-

garding the intimacy of the extension forces, supported in part with Federal funds, with the farm bureaus, led to an investigation by Congress of the farm organizations with Washington offices and more particularly of the American Farm Bureau Federation and its relations with the extension forces. Hearings were held January 21, February 1 and 15, and July 20, 1921, before the Committee on Banking and Currency of the House of Representatives. The record of these hearings was published under the title of "Farm Organizations" (*275*). Practically nothing which was not already known regarding the connection of the extension service with farm organizations was disclosed in these hearings. Interest in the investigation finally lapsed, and the committee made no report beyond the record of the hearings.

Meanwhile, a committee of the American Farm Bureau Federation canvassed the situation, and as a result the following memorandum regarding the relations of the farm bureaus to the extension service was signed by the writer as director of the States Relations Service, and J. R. Howard, president of the American Farm Bureau Federation, on April 21, 1921.

THE FARM BUREAU AND THE EXTENSION SERVICE (*247*)

A memorandum of understanding between the executive committee of the American Farm Bureau Federation and the States Relations Service, United States Department of Agriculture, relative to farm bureaus and the extension service.

Since questions have arisen regarding the relations of the farm bureaus to the cooperative extension service of the State agricultural colleges and the United States Department of Agriculture, it has seemed desirable for the national organizations representing the farm bureaus and the extension service to formulate and recommend to their State and county organizations the following general outline of a policy which may govern the relations of the farm bureaus and the extension service in their cooperative enterprises.

THE FARM BUREAU

The county farm bureau is a voluntary organization of people engaged in farming and has for its object the promotion of the economic and social interests of agriculture, including research and education, the farm home, and the rural community. It is nonsecret, nonpartisan, and nonsectarian and it is its policy as an organization not to engage in commercial activities. It is open to both men and women on equal terms. While it may engage in other activities it is greatly interested in the promotion of the cooperative extension work in agriculture and home economics organized by the State agricultural colleges and the United States Department of Agriculture under the Smith-Lever Extension Act and related Federal and State laws. It may, therefore, cooperate with the extension service of the State agricultural college and the department by contributing of its funds toward the maintenance of one or more extension agents in the county and joining in the work of the extension service through its committees and otherwise under agreements with the State extension director. The farm bureau is organized with a president, secretary, treasurer, and executive committee, who will themselves or through other representatives of the farm bureau solicit memberships, collect dues, handle its funds, and in general manage its affairs.

THE EXTENSION SERVICE

The cooperative extension service of the State agricultural college and the United States Department of Agriculture is organized as a division of the college to conduct extension work, defined in the Smith-Lever Extension Act as follows:

"Sec. 2. That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this act."

This extension work will deal not only with agricultural production but also with economic problems, including marketing and cooperative associations and with the interests of the farm home and the rural community. The extension service, including the county agent, is as much interested in the marketing, distribution, and utilization of farm products as it is in production, and it may properly give information and help in all these lines.

The extension service in each State is under the administrative management of an extension director, who is the joint representative of the college and the department. Under the director are the State agents or leaders, the extension specialists and the county agricultural agents, home demonstration agents, and club agents or leaders. The extension directors are authorized to enter into cooperative agreements with county officials and farm bureaus or like organizations with reference to financial support for the maintenance of extension work in the county and the plans for the use of the cooperative funds in the extension work within the county.

BASIS OF COOPERATION

The general basis of cooperation between the county farm bureau and the extension service will be as follows:

The county agricultural agents, home demonstration agents, and club agents cooperatively employed will be members of the extension service of the State agricultural college and under the administrative direction of the extension director, and will carry on such lines of extension work as may be mutually agreed upon by representatives of the agricultural college and the farm bureau or other like organizations.

Since these county extension agents are part of a public service, as defined in the Smith-Lever Act, and receive some part of their salary from public funds, they are to perform services for the benefit of all the farming people of the county, whether members of the farm bureaus or not, and are to confine their activities to such as are appropriate for public officials to perform under the terms of the Smith-Lever Act. The county agents will aid the farming people in a broad way with reference to problems of production, marketing, and formation of farm bureaus and other cooperative organizations, but will not themselves organize farm bureaus or similar organizations, conduct membership campaigns, solicit memberships, receive dues, handle farm-bureau funds, edit and manage the farm-bureau publications, manage the business of the farm bureau, engage in commercial activities, or take part in other farm-bureau activities which are outside their duties as extension agents.

The county agents and other extension agents will cooperate with the farm bureaus or other like organizations interested in extension work in the formulation of county and community plans of cooperative extension work. It will then be the duty of the county agents, under general direction of the extension director, to take charge of the carrying out of such plans and to cooperate with officers, committees, and members of the farm bureaus and with other organizations and residents of the county in the prompt and efficient execution of these plans.

TERMINOLOGY

In order to do away, as far as possible, with the confusion now existing in the public mind regarding the organization and work of the farm bureau as related to the county agents and the extension service generally, it is recommended that hereafter in publications and otherwise the cooperative extension service shall be differentiated from the farm-bureau work; that is, the farm bureau will have its relations with the extension service (consisting of the county agents, extension committee, demonstrations, etc.) as one of its departments. Other departments might be a publicity department, which would prepare and publish a periodical (Farm Bureau News), press articles,

and notices, announcements of meetings, etc., department of relations with marketing and other cooperative associations, etc.

The work which centers in the county agents would be designated as the cooperative extension service and the miscellaneous enterprises of the farm bureau as farm-bureau work.

FARM-BUREAU FEDERATION

The county farm bureaus have their State and national (American) farm-bureau federations, which are working on economic and legislative matters and are also promoting the extension service and agricultural education and research. These federations are, however, not directly connected with the extension service and do not enter into cooperative agreements with the State colleges and the Department of Agriculture involving the use of federation funds and the employment of extension agents, and the college and the department are not responsible for the activities of the farm-bureau federations. There is, however, much advisory consultation between representatives of the farm-bureau federations and officers of the colleges and the department with reference to plans for advancing the agricultural interests of the States and the Nation.

This agreement was adopted in Washington, D. C., on April 21, 1921, and upon authorization of the duly constituted authorities was signed by

J. R. HOWARD,
President, American Farm Bureau Federation.
A. C. TRUE,
Director, States Relations Service,
United States Department of Agriculture.

This memorandum was useful in establishing definitely the policy of the American Farm Bureau Federation regarding the relations of the farm bureaus to the extension forces, and had a restraining influence on State and county farm bureaus and county agents when they were inclined to go too far in commercial activities.

It was, however, impossible to bring about ideal conditions with reference to these matters in the widespread extension organization at a time when the interest of the farmers in their economic problems was so intense because of their financial difficulties, and cooperative marketing was presenting so many new problems. Discussion of relationships, therefore, went on within and without the extension organization.

To further clarify the position of the Department of Agriculture on this matter, Secretary Wallace issued the following statement August 25, 1922:

* * * the work of the cooperative extension employees, whether county agents, home demonstration agents, boys' and girls' club agents, or other cooperative extension workers, is educational. These extension workers are public teachers paid with money largely raised from all of the people by taxation and are charged with giving instruction and practical demonstrations in agriculture and home economics. Their work covers the entire rural field, which includes economic production, economic marketing, and the development of better home, community, and social conditions.

As they are public teachers, it is not a part of the official dutie of extension agents to perform for individual farmers or for organizations the actual operations of production, marketing, or the various activities necessary to the proper conduct of business or social organizations. They may not properly act as organizers for farmers' associations; conduct membership campaigns; solicit membership; edit organization publications; manage cooperative business enterprises; engage in commercial activities; act as financial or business agents, nor take part in any of the work of farmers' organizations, or of an individual farmer, which is outside of their duties as defined by the law and by the approved projects governing their work. They are expected, however, to make available to organizations such information as will be helpful to them and contribute to the success of their work.

* * * the law contemplates cooperation with farmers' organizations willing to cooperate in the work with which the cooperative extension agent is charged. It is the duty of the extension agents to render such assistance whenever possible in his teaching capacity to any agricultural organizations desiring it. Furthermore, the work of these extension agents can be the most effective where it is carried on with organized groups of rural people. It is entirely proper for any agricultural organization desiring to cooperate financially in the work of the extension agents to contribute funds for the support of such work, and these funds may be accepted legally by the extension service of the agricultural colleges and by the Federal Government for work on approved projects.

In short, it is the business of the extension agent to cooperate with all agricultural organizations which desire to cooperate on approved projects. If more than one organization exists in a county he must cooperate with all fairly and impartially in the educational work in which they are mutually interested.

The Department of Agriculture must necessarily consider in its administration of Federal cooperative extension funds the laws which have been passed by the various State legislatures in accepting these funds and under which agreements have been made with those States for conducting this work. If special provisions relating to the methods of cooperation with agricultural organizations or other agencies are contained in the State laws, which do not conflict with the Federal laws, it is clearly the duty of the Secretary of Agriculture to accept such provisions in a cooperative project.

The committee on extension organization and policy of the Association of Land-Grant Colleges, formerly the Association of American Agricultural Colleges and Experiment Stations, also considered this matter in 1922, and in their report for that year, which was approved by the executive body of the association, defined the duties of extension workers and their relation to organizations as follows:

Extension workers, including county agents, home demonstration agents, boys' and girls' club agents, specialists, and other workers, are representatives of the State agricultural colleges and United States Department of Agriculture and should use their time and efforts in giving helpful information to the people of the various communities. These field agents are expected to carry the work of research departments to the people on the farm and in the home. They are expected to give information on marketing, as well as production. They should give information on cooperative enterprises and are within their field when they give information on methods of organizing to carry out the desired projects. On the other hand, the extension agents are not authorized and should not perform for individual farmers or for organizations the actual operations of production, marketing, or the various activities necessary to the proper conduct of business or social organizations. They should not act as organizers of farmers' associations; conduct membership campaigns; solicit membership; edit organization publications; manage cooperative business enterprises; engage in commercial activities; act as financial or business agents, nor take part in any of the work of farmers' organizations or of an individual farmer, which is outside their duties as defined by the law and by the approved projects governing the work (*1*).

ATTEMPT TO UNIFY DEPARTMENT AND COLLEGE ADMINISTRATION OF EXTENSION WORK

Problems relating to the organization of the department and college offices of extension work were given much attention from 1920 to 1923. As the extension system developed under the Smith-Lever Act, it became in spirit, aim, and actual performance more and more a nationally unified system. It therefore seemed unfortunate to perpetuate the division between the southern and northern extension work of the States Relations Service.

At the meeting of the Association of Land-Grant Colleges in 1920 the executive committee was asked to consider the advisability of recommending to the Secretary of Agriculture that the two extension offices be combined. The retirement of Bradford Knapp, chief

of the southern extension office, soon thereafter, opened the way to bring this about, and on October 1, 1921, the combination was made effective.

As the cooperative extension work under the Smith-Lever Act had developed, three main lines of work had become differentiated and had assumed major importance both in the counties and in the State and national overhead organization. These were the county agricultural agent work, the home demonstration work, and the boys' and girls' club work. Each of these lines of work in many States had State leaders in the college organization and in the northern extension office at Washington. In the southern work, the boys' clubs were supervised by the agricultural agents, and the girls' clubs by the home demonstration agents. The work of the extension specialists was not so well organized and did not have so definite recognition in the overhead organization. The leaders of the three well-organized lines of work were chiefly interested in the promotion of their respective branches. As the contacts between national and State leaders became more frequent and intimate there was a tendency for them to deal with administrative matters which in reality belonged to the extension directors. A feeling therefore grew up among the higher administrative officers in the colleges and the department that the prevailing overhead organization tended to break up the unity of the extension system and lead to competition, rather than cooperation, between the agents engaged in the several lines of work. One factor in the situation was the diminution of the number of county home demonstration and club agents after the war. It was then more important than ever before that the county agricultural agents should take an interest in the extension program as a whole and do what they could to promote the work for farm women and children, as well as that for men.

This matter came to a head in 1921 under the leadership of C. W. Pugsley, as Assistant Secretary of Agriculture and former extension director in Nebraska. As the result of conferences with officers of the States Relations Service and the extension committee of the Association of Land-Grant Colleges and replies from agricultural college officials to a questionnaire sent out from the Department of Agriculture, a new plan for the organization of the extension work in the Department of Agriculture was formulated. This was explained by Doctor Pugsley at the meeting of the Association of Land-Grant Colleges in November, 1921. The defects in the prevailing type of extension organization in the colleges, as well as in the department, were described by him as follows:

(1) The division of the work administratively along the lines of sex and age made a unified extension program very difficult. Try as we would to work out a program of agricultural progress for the State and for each county, we found our workers unconsciously regarding their problems from the standpoints of women's work, men's work, or junior work, rather than from the standpoint of the complete needs of a rural community.

(2) This led to administrative difficulties. The several agents often appeared separately before groups of farmers or before county commissioners presenting their claims for support. They could not be severely censured for this attitude, for they were charged with responsibility for but one line of work. The difficulty rests with the system rather than with the agents.

(3) Many counties were financially unable to support a program calling for three agents. Others were unwilling.

(4) The inevitable result was the neglect of some important line of work. Either the men, the women, or the children must be left out of consideration (*1*).

As an example of a more unified organization of extension work, which it was hoped would favorably influence the State organizations, it was proposed to do away with the divisions in the Federal Office of Cooperative Extension Work relating to the county agents, home demonstration agents, and boys' and girls' club work, and substitute divisions dealing with extension projects, subject matter, and methods of teaching, respectively.

The first [division] is one into which the projects, coming from extension directors, are fed and looked over from the standpoint of an extension program as a whole; the second is a division of subject-matter workers; and the third is a division of specialists in methods of extension teaching. When we finally put the plan into effect, it will call for the reassignment of the workers of the North and South, but not a lessening of their efficiency or a radical change in their general duties (*1*).

After some experience in operating under this plan it was found that the work of the projects and subject-matter divisions overlapped to a considerable extent. These two divisions were therefore combined. The duties of these divisions were summarized as follows:

Division of programs.
- (a) Administrative contacts with States not specially retained by chief.
- (b) Analyze world and national agricultural conditions and develop national and district programs for extension work in agriculture and home economics.
- (c) Assist State extension directors to develop extension programs.
- (d) Allot funds to States.
- (e) Review projects.
- (f) Review budgets and budget revisions.
- (g) Approve record forms.
- (h) Approve extension plans of bureaus and States.
- (i) Make State inspections.
- (j) Cooperate with reports section in office administration.
- (k) Cooperate with extenion council in preparing annual report covering whole field of extension work.

Division of methods.
- (a) Analyze and study methods of extension teaching and field organization.
- (b) Assist State extension directors in subject-matter teaching and field organization and methods.
- (c) Review bureau and State plans for extension work.
- (d) Consult with department bureaus on extension teaching methods in:
  1. Demonstrations.
  2. Publications.
  3. Posters.
  4. News items.
  5. Slides.
  6. Films.
- (e) Prepare illustrative material for extension teaching.
- (f) Cooperate with reports section in office administration.
- (g) Cooperate with extension council in preparing reports and bulletins covering subject-matter and organization of extension work (*1*).

There was at this time a prejudice in some of the States against regional assignments of officers of the States Relations Service. For this reason an attempt was made to have all workers in the Federal extension office, who went out to deal with administrative extension officers in the States, familiarize themselves with conditions

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existing in the extension work throughout the United States and be prepared to go into any State, especially when their services were requested by extension directors.

The size of the country and the variety of problems to be dealt with made it impracticable to work satisfactorily on this theoretical basis, and there was a gradual return to regional assignments as far as dealing with projects, inspection of work, and accounts was concerned. It was also found that since the States, generally, persisted in the differentiation of the work of the agricultural agents, home demonstration agents, and boys' and girls' clubs both in the counties and in the State leadership, it was necessary to take this into account in the Federal extension office and to have there officers specializing in these lines of work, respectively. These specialists were, however, brought together in administrative groups, and their activities were thus in large measure unified.

On June 30, 1923, the Office of Cooperative Extension Work included the following divisions: (1) Division of projects, inspection, and extension methods. This was subdivided into four sections dealing respectively with the Eastern, North Central, Southern, and Western States. Each section contained men and women, and there was some specialization as to the work of the county agricultural agents, home demonstration agents, and boys' and girls' clubs. (2) Division of subject-matter specialists, including those in agronomy, horticulture, forestry, plant pathology, animal husbandry, agricultural economics, human nutrition, and club organization. In general, these specialists were joint representatives of department bureaus and the extension service. (3) Division of reports and studies of the efficiency of extension work. (4) Division of visual instruction and editorial work.

The change in organization of the Federal extension office, begun in 1921, was accompanied with a more definite understanding that all the department's business with the State extension services would be conducted through the extension directors at the agricultural colleges. This included both the administrative business involved in the relations of the States with the department under the Smith-Lever Act, and the extension work of the department bureaus in the States. In this way the State extension directors were enabled to have better administrative control of all the extension forces operating in the States, and thus to make and carry out better organized and more fully unified programs of extension work. The work of the extension specialists in the different branches of agriculture and home economics which had grown in amount, variety, and importance, was better organized and more distinctly correlated with the activities of the county men and women agents. In the Western and North Central States there was a definite tendency toward centralization of administrative responsibility for the extension program in a county in a single head, designated by the extension director.

INCREASED ATTENTION OF EXTENSION SERVICES TO EDUCATIONAL ACTIVITIES

In spite of the great economic depression of agriculture between 1920 and 1923 and the consequent extraordinary interest in cooperative marketing among the farming people, the extension services were

able to resume more fully their functions as educational agencies. Undoubtedly it was easier to keep the county agents within the educational field because of their better understanding of the complexity and difficulty of cooperative marketing, especially in a period of deflation and falling prices. Conservatism had come, in part, from unfortunate experiences of extension agents who had rashly engaged in commercial activities.

The farming people themselves realized that under existing conditions the financial support of the extension system must come largely from public sources, and that, therefore, extension agents must be more careful to keep within the proper limitations of public officials. The farmers wanted and received the help of the extension agents in economic matters, but they also desired the services of these agents in promoting economical production of farm products, protection against plant and animal diseases, and the better preparation of products for market through grading, packing, and other operations. The diminishing isolation of farming people through the influence of the telephone, free rural mail delivery, and good roads and automobiles had created a profound desire for better living conditions on the farm. Even in the face of diminished incomes, they desired to continue improving home equipment and sanitation, and to provide better schools and a more satisfactory community life. The men and women extension agents, therefore, were fully occupied in a wide range of educational activities, and their services were appreciated.

Extension forces were also realizing that they could not reach large numbers of people effectively without the active cooperation of many local leaders. They therefore increased their efforts to get beyond the county organization supporting their work and to build their programs on a community basis. The extent to which this movement had progressed, during the period under consideration, was shown in the report of the States Relations Service for 1923 in which Doctor Smith made the following statement:

> The maxim that all programs of extension work should be based on an analysis of local or community needs has been given increasing support, as shown by the greater number of community programs developed throughout the United States. More than 21,000 communities in counties now employing county extension agents have local committees or clubs which join with the extension agents in developing and working out local programs of work. In developing such community programs, however, very definite progress has been made in the direction of securing more specific programs—programs that express more nearly the problems of the people locally. This has been brought about through the close contact with leaders in the various communities and by more thorough analysis. With this has come, also, greater realization of the need for developing in the community a permanent program which includes a limited number of the larger farm and home problems. There has also been a tendency to insure a definite and more widespread adoption of recommended practices, during a reasonably brief and specific period of time, by incorporating in such programs 5-year or 10-year goals.
>
> There has been fine response to the principle that the programs of extension work should express the needs of all rural interests, those of the farm, the home, and the youth of the farm, as well as of farming industries in general.
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> * * * * * * *
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> In connection with the determination of local and county programs of extension work, county extension agents are testing, as never before, the solutions and recommendations which heretofore have been suggested. This has been necessary because closer contact with the people in a community brings better recognition of local habits, prejudices, economy, equipment, practices, and in general of local needs and conditions. It is being found that it may

often be necessary to make adjustments and changes in the recommendations heretofore made in order to secure greater adoption of practices. These local conditions may affect not only the recommendations made but also the kind of teaching carried on (*277*).

The larger realization that extension work in agriculture and home economics is essentially an educational enterprise was beginning at this time to have important results in the attitude of extension agents and farming people toward extension work, and led supervisory officers, specialists, and county agents to consider the methods of instruction appropriate to such work. Investigations in educational circles as to the need of fitting instruction to the mental status of the learner, and the growing interest in the problem method of teaching, began to react on extension workers who were energetically attacking their task. Attempts to analyze agricultural enterprises into the various jobs included in each were attracting attention. Studies of the extent to which farming people were adopting new practices as the result of extension work were also raising questions as to why it is often difficult to achieve widespread adoption of practices thoroughly tested and approved. Referring to this matter, Doctor Smith made the following statement in the States Relations Service report for 1923:

Such considerations have created greater interest in and directed more attention to the study of extension work as a teaching job, with special reference to finding out not only the conditions which may naturally prevent the people from adopting practices, but also those elements or principles of pedagogy and psychology which should be applied in order to bring about widespread interest on the part of the local people and impel them to accept and adopt the better practices. With this has come an appreciation on the part of extension agents of the fact that there are great differences in people, as to their ability to adopt practices, and that the teaching effort needs to be defined in terms of these differing degrees of ability. As a result extension agents are studying the question of breaking up problems into single phases and giving increasing attention to developing the teaching of better practices in terms of single simple practices. * * *

With the recognition of the need for teaching by single practices has come also a greater use of project leaders or key demonstrators as extension teachers. This is natural, and with concentration on teaching by single practices the duties and responsibilities of project leaders have become more important and the accomplishments greater in number. The very great progress that has been made by training project leaders in terms of single practices in the field of home demonstration work has directed the attention of specialists and county agents toward adopting the same method in working out agricultural problems. It is being found that the usefulness of project leaders as teachers is most closely connected with the degree to which specialists and county agents have been able to analyze the problem and break this up into smiple phases and teach in terms of single practices. Project leaders can be trained in terms of single practices who could not be trained in terms of principles and are then able to teach others in terms of single practices (277).

The agricultural colleges were being called upon to give training in methods of extension work to students preparing for this work and extension agents already in service. An attempt to meet this demand was made at the New York State College of Agriculture, when D. J. Crosby, who had for years given special attention to the problems of agricultural education in connection with the work of the committee on instruction in agriculture of the Association of Land-Grant Colleges, was transferred from an administrative position in the extension division of the college to a newly created department of extension teaching. In discussing the training of county extension agents before the extension section of the Association of Land-Grant Col-

leges in 1922, Professor Crosby gave the gist of replies to his inquiry made to 40 extension directors and 1,414 county agents. His summary of the results of this inquiry and his view of the duty of the agricultural colleges in this matter were expressed at this time as follows:

(1) That the primary functions of the county agents are educational in character—the Secretary of Agriculture has expressed his opinion to this effect, and in this view he has abundant support.

(2) The directors of extension believe that county agents need professional training and in specifying studies needed in this connection have mentioned professional studies in education more frequently than any others. Furthermore, 90 per cent of the subjects mentioned by 50 of the supervisors of county-agent work in the South were related to professional improvement.

(3) Ninety per cent of the county agents who expressed opinions believe in specialized training for their positions and give psychology and subjects in education a large part in the program.

(4) It is the plain duty of the land-grant colleges to meet every demand, so far as they are able to do so, for the better preparation of candidates for county-agent positions. These colleges now have facilities for training vocational teachers, which facilities they should make available to prospective agents. To this end they should plan curricula that will embrace their available basic courses in rural economics, rural social science, and professional studies, including at least one course dealing with extension organization, policies, and methods.

(5) All of the colleges should consider plans for the professional improvement of agents now in service—preferably plans that will enable them to get entirely away from their counties for periods of several weeks or months to study.

(6) A few of the colleges that offer graduate work in rural education, rural economics, and rural sociology should give serious attention to the development of graduate work that will attract extension workers and encourage some of them to make thorough and scholarly study of the problems of extension teaching (*1*).

Interest in better teaching methods was at this time reverting to the wide use of demonstrations supplemented by frequent demonstration meetings, tours, and local excursions for observation. Visual instruction was promoted by an increased use of charts, posters, project exhibits, and, as a recent innovation, motion-picture films.

The old type of campaign is disappearing, and one more effective is now being used by county agricultural agents. This follows the realization that teaching may properly be divided, for most people, into three stages: (1) Developing interest and attention, (2) establishing confidence and desire, and (3) impelling decision and action. By outlining the plans of work for any project so that the first two are instilled by the adequate and well-planned use of demonstrations, demonstration meetings, tours, exhibits, illustrative material, trained project leaders, and publicity, the demonstration or teaching period may be shortened and merged with, or followed by, a campaign period in which an intensive use is made of the records and results obtained in the demonstration period. The aim of teaching is that a large number of persons shall adopt and profit by improved practices.

COUNTY AGRICULTURAL AGENT WORK, 1920 TO 1923

The permanent character of the county agricultural agent work was shown after the withdrawal of the war-emergency funds. In the Southern States, where county agents were almost exclusively

supported by public funds, the number of white agricultural agents was reduced to approximately the number employed when the United States entered the war. On July 1, 1917, there were 888 county agents in the South, and in 1920 there were 869. The number of negro agents, who were largely paid from Federal funds, increased during this period from 66 to 158. The total number of supervisory officers and county agents was 1,038 in 1917 and 1,118 in 1920. Notwithstanding the severe economic depression which then ensued, the total number engaged in county-agent work at the end of 1921 was 1,106. The southern agents continued to have the support of a considerable number of State, county, and community organizations, including the Farmers' Union, farm bureaus, livestock, truck, cotton, and tobacco associations. In 1921 they dealt with 585 county organizations, including 7,583 farmers' or community clubs, 4,828 of which were on a family basis. The total membership of these organizations was 295,000.

The county agents were required to submit to their supervisory officers, at the beginning of each year, a plan of work. This was usually made at a meeting of men and women agents working jointly with a committee of representatives from the organized communities. This plan was sent by the district agent to the State office, where the State leaders and specialists made revisions and suggestions before it was approved. With the aid of these county plans a State program of work was formed. In 1921 in all the Southern States the work included demonstrations in soil improvement and with field crops, orchards, vegetables, livestock, boys' club work, community organization, and encouragement of cooperative marketing.

Demonstrations had always occupied a prominent place in extension work in the South, but during the war they had been somewhat crowded out by more pressing work. They were again stressed by the agents after the war, and in 1921 there were 176,766 in the 15 Southern States, or an average of 182 per county agricultural agent.

In 14 States in 1922 the agricultural agents in nearly 500 counties reported work on farm-home projects, including water supply, lighting, sewage disposal, improvement of home grounds, screening of houses, and improvement of farm and home sanitary conditions. They also enrolled 98,095 boys in clubs. Meetings connected with the work of 891 county agricultural agents numbered 84,725. The high price of cotton up to the fall of 1920 had caused many southern farmers to return to a one-crop system, and interest in field demonstrations with other crops had declined. But when prices fell, and many farmers were in financial distress, the county agents were appealed to for help. Community and club demonstrations were then developed on a larger scale with hay and forage crops, permanent pastures, orchards, and soil improvement. The beef-cattle industry had a severe setback, but the better-sires campaign in cooperation with the Bureau of Animal Industry, was continued, and dairy and poultry demonstrations were numerous. Commodity marketing organizations, especially for cotton and tobacco, began to be formed and engaged the attention of the county agents to a large extent. Exhibits at community and State fairs assumed more importance.

In the Northern and Western States the county agricultural agents had so far shown their importance and efficiency as factors in agricultural welfare and improvement that when the war-emergency funds were taken away the counties generally retained these agents and new counties sought them. Here and there counties gave up their agents, and a considerable number of assistant agents were dispensed with, but the number of counties with agricultural agents steadily increased. In 1918 there were such agents in 1,086 counties and in 1921 in 1,213 counties. The agricultural agent's salary increased to an average of about $2,700 in 1921, and he was generally furnished with office help and an automobile. These agents often became administrative leaders in the county extension work. Sometimes the agricultural agent was called "deputy county extension director," and sometimes he was chairman of a county extension committee. He did not, however, supervise the work of the home demonstration and club agents, but endeavored tactfully to promote coordination and unity of the county extension program. Often he represented the general interests of the extension work before the county appropriating boards or the cooperating farm bureaus. His office was often a headquarters for all the county extension work. While the average number of visits to farms annually remained somewhat less than 500, the average number of calls by farmers at his office rose from 770 in 1917 to 1,482 in 1921.

He gave up the management of the Farm Bureau News, but continued to contribute many articles to this and other publications in the county, and sent out much mimeographed material, had a large correspondence, and distributed many college and Department of Agriculture publications.

Instead of increasing field service to individual farmers, he dealt more largely with community groups in committees and public meetings, and, as a result, spent nearly twice as much time in the field as in the office. More attention was given to the survey and analysis of the needs of the different communities, and definite goals of achievement were set in the community programs. Demonstration work had been held largely in abeyance during the war, and it was necessary to stimulate the interest of the agents and their constituencies in such work. As the result of efforts in this direction, the number of demonstrations per agent rose from 45 in 1920 to 92 in 1922. The total number of demonstrations that year in the 33 Northern and Western States were 119,806, of which 62,565 were with soils and crops, 37,837 with livestock (including 17,658 on poultry culling), and 2,015 on farm economics and marketing. In connection with the demonstrations, 66,951 meetings were held with an attendance of 1,327,603. There were also 2,147 tours and excursions. In 620 counties 4,985 farmers' institutes were held with an attendance of 1,024,666 and 3,526 extension schools or short courses with an attendance of 263,560.

The cutting down of the force of county home demonstration and boys' and girls' club agents after the war made it necessary for the county agricultural agents to do more work along these lines. In 1921, 604 agents in the Northern and Western States did farm-home work, including installation of water and sewerage systems, improvement of houses and grounds, introduction of labor-saving machinery,

and promotion of home gardens. They also assisted the home economics specialists in organizing home demonstration work in counties without women agents. That year 936 agricultural agents organized 6,176 boys' and girls' clubs with 78,764 members, 45,443 of whom completed their club work.

The financial depression beginning in 1920 led many of the more intelligent farmers to study the problems of economic production, improvement of the quality of their products, and better methods of standardizing and preparing products for market. These matters, therefore, assumed greater relative importance in the work of the agricultural agents and supplanted their promotion of cooperative marketing organizations, which was passing into the hands of the farms bureaus and commodity organizations.

The State leaders of the county agricultural agents were analyzing and altering the county programs to meet the real needs of agriculture. Occasionally a State agricultural program was developed. "Such programs are coming to be not mere catalogues of specialists' projects but well-planned outlines of the fundamental problems that need to be attacked in a district or State." Methods of extension teaching also were studied, and interest was arising for the establishment of special college courses for future extension workers and for those already in service.

State leaders and county agents in the Northern and Western States were planning and conducting their work jointly with the farming people, as is shown by the following statistics for 1921. In extension work 17,921 communities were included, with 13,918 committees having 66,119 members. To interest farming people in the extension programs, 53,679 community meetings were held, with an attendance of 2,182,000. There were also 677 county project committees, which held 7,329 meetings. The total number of meetings of all kinds connected with the work of agricultural agents in 1,281 counties in 1922 was 173,804.

HOME DEMONSTRATION WORK, 1920 TO 1923

Home demonstration work in the Southern States had become so well established and had proceeded along lines so well suited to the needs and conditions of the farm women and girls there that, after the withdrawal of the war-emergency funds, many of the counties which had home demonstration agents retained them. The city agents were withdrawn, and the number of negro women agents declined from 250 in 1919 to 75 in 1921. The number of counties with white agents at the close of that year was 485. The force of assistant State leaders and district agents was 67, or twice as many as had been employed in 1917. The total number of home demonstration workers in the South in 1921 was 641, as compared with 566 in 1917.

In the 33 Northern and Western States the number of county home demonstration agents declined from 602 on July 1, 1918, to 214 in 1920, but rose to 243 in 1921. On January 1, 1919, there were 109 city agents, a year later only 11, and at the end of 1921, 3. But the work had become sufficiently established in most of these States to employ at that time 302 State and county home demonstration workers, as compared with only 27 in 1917.

During 1922 there was a net gain of 84 home demonstration agents in the 48 States, and 911 counties had the services of such agents, as compared with 544 in 1917. The funds from Federal, State, and county sources allotted to home demonstration work were $2,226,228 in 1917–18 and $3,344,718 in 1922–23.

In the South the plans of work and the local and county organizations of farming people cooperating in this work changed slowly. The field of work was broadened, especially in respect to projects for health, home sanitation, and child care.

In the North and West it was necessary at the close of the war to make many readjustments of organization and work, and to study the actual conditions in the farm homes and communities, and the forms of organization best suited to the circumstances of the farm women in the several States. As an aid in planning permanent home demonstration work in this region the Office of Cooperative Extension Work and the agricultural colleges cooperated in a survey of approximately 10,000 farm homes located in various parts of the Northern and Western States. A large amount of valuable data covering various conditions was thus brought together and classified. Both the Washington office and the several States were by this means informed of the problems needing the attention of extension work in home economics.

A summary of significant comparable data was published as Circular 148 of the United States Department of Agriculture, under the title "The Farm Woman's Problems" (*278*). It was found that conditions varied in different parts of the country. To illustrate this, summaries were made for three great districts, the East, Central, and West. The following general averages for all farms will show the character of the survey and its outstanding results. The working day of the farm woman averaged about 13 hours in summer and 10 in winter, with rest periods of from 1.6 to 2.4 hours. Thirteen per cent of the women had a vacation of about 12 days. An eight-room house had to be cared for, with a kitchen range and at least one heating stove. About 79 per cent of the women used kerosene lamps, 61 per cent carried water from an outside well, 96 per cent did the washing, 92 per cent did sewing, and 94 per cent made bread. Of the farm homes 96 per cent were screened, and there were sewing machines in 95 per cent, but only 32 per cent had running water, 20 per cent had bathtubs, and 15 per cent had power to operate household machines. Few hired women were employed by the year, and only 14 per cent of the farm women had hired help even for short periods—usually in the summer. As regards work outside the house, 85 per cent cared for chickens, 25 per cent for livestock, 56 per cent for gardens, 36 per cent milked cows, 33 per cent made butter to sell, and 24 per cent engaged in field work for an average period of about seven weeks. About 30 per cent kept houshold accounts, and 32 per cent kept farm accounts. There were automobiles at 62 per cent of the farms, and telephones in 72 per cent of the farm homes. From the average home it was 6 miles to a high school, 3 miles to a church, 5 miles to a market, 5½ miles to a doctor, 12 miles to a trained nurse, and 14 miles to a hospital.

This survey showed that among the urgent problems of the farm woman which the home demonstration workers might help to solve

were the shortening of the working day, the lessening of labor, the improving of home equipment (particularly by rearranging the kitchen and installing running water, power, and a modern heating system), the promoting of higher standards of comfort and beauty in the home, the safeguarding of the health of the family (especially by better selection and preparation of food, more intelligent care of children, and sanitation of the home and its surroundings), the developing of money-yielding home industries, and the more satisfactory allotment and expenditure of the family budget. There were also problems connected with the farm family and the school, the church, and organized recreation and social life, as affected by modern transportation and communication, which tend to relieve isolation and to tie farm homes and rural communities to the villages and the cities.

The rapid organization of farm bureaus, and the great increase in their membership, created the problem as to which organization is best adapted to extension work among farm women. The county farm bureaus and their State and national federations became so absorbed in the economic problems of agriculture, then growing more intense and perplexing, that they gave less attention to the needs of the farm women and home demonstration work. In many counties separate organizations of farm women were suggested for work with the home demonstration agents. In Illinois there had been from the beginning separate local organizations among women interested in home demonstration work. In New York home bureaus were organized in some counties to parallel the farm bureaus, and after a time a State federation of home bureaus was formed.

For various reasons, it appeared that an entirely separate organization of women was not desirable, but that the interests of the farm women should be considered in all work for the improvement of agriculture and country life, so the county farm-bureau organizations in New York broadened their name and became farm and home bureau associations, with separate departments for the special work of women, more or less coordinated with the general program for extension work. Home bureaus were also formed in some counties in New Jersey and North Carolina. The inclusion of village and city women in considerable numbers in the organizations with which the home demonstration agents worked was an influence toward a separate organization for women's work, but farm bureaus and their federations continued to welcome farm women to active membership.

The State and Federal authorities dealing with extension work generally favored united action by men and women in planning and conducting extension work. It was not always easy to bring about an ideal relationship of men and women in this work, and the home demonstration agents often dealt with separate groups of women. A great improvement in this direction was accomplished by the more thorough organization of communities and counties on projects framed by groups of local leaders, both men and women, acting in cooperation with the county and State extension agents. The training of men and women as local leaders in extension work has also helped to bring out the necessary union of the interests of men, women, and children on the farms in whatever improves agriculture and country life. It is recognized that united action in promotion of the general

program of extension work does not prevent specific activities by farm women in cooperation with the home demonstration agents whenever the character of the project makes separate work desirable.

It seemed clear that economic conditions would not permit the rapid expansion of the force of county home demonstration agents in the North and West, so extension directors and State leaders considered carefully how the supervisory force and extension specialists going out from the colleges could assist in building up home demonstration work in counties without women agents, and what county agricultural agents could do toward laying the foundation for the employment of more women agents whenever the economic conditions and the interest of farm families warranted such a movement.

Home demonstration work in the 48 States during 1922 was described by Miss Grace E. Frysinger, of the Office of Cooperative Extension Work, in Circular 314 of the United States Department of Agriculture (*239*) on which the following statements are based. The work was carried on in the counties (1) by resident women agents, (2) by district agents serving more than one county, or (3) by agricultural agents with the assistance of home-economics specialists from the agricultural colleges. "In some States the women and girls were organized separately from the men and boys. In others the women were organized into one group, men into another, and boys and girls into still another group." In some States men and women met together to discuss farm, home, and community needs and to plan the program of extension work for adults and juniors, with the assistance of the extension staff.

In some States the groups met at regular intervals; in others, only as the needs of the projects undertaken demanded. In some States the program consisted of two or three projects to be carried throughout the year, and in other States a variety of projects, sometimes 10 or 12, were taken up on a seasonal basis throughout the year.

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In most States the community has been accepted as a unit for a program of work. Much has been accomplished in getting the local people to cooperate with the home demonstration agents, in analyzing the home needs, and in planning a program of work for the year which would be limited in extent, yet meet the fundamental needs of the majority of the homes of the community.

In most States some type of county body was also developed. The nature of such bodies varied. In some States it was an advisory body to discuss with the agents any plans and policies for organization, finance, and program. In other States it served as an administrative body to determine policies only. In States where the latter type existed, an advisory council usually supplemented the executive committee in rendering general advisory assistance to the agent.

In some States the county committee acts as the county projects committee in addition to its administrative duties. The county project leaders assume responsibility for leadership in the projects with which they are concerned and aid in the development of the project, summarizing results obtained and reporting on the same at such meetings as may seem desirable.

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In every State much responsibility was accepted by local people. The leaders developed were of varying types. In some States the leaders have assumed responsibility for notifying local people of the dates of meetings, have arranged for any necessary equipment, have served as general liaison officers between the agents and the people, and have acted as demonstrators of improved practices in home making. In other States the local leaders have accepted such responsibilities, and in addition have enlisted the active participation of other women and have assumed responsibility for secur-

ing records of practices adopted. A third type of leadership included not only the aforenamed responsibilities but those of acting as the recognized representative of a community or township to receive from the specialist or home demonstration agent training in subject matter, in methods of presenting the subject matter to others, and in securing records of results. A fourth type of leadership differed from the previous one in that the trained leader returned to her community as the community project leader and trained other women to become local leaders in the community, the community or project leader assuming responsibility for supervising the local leaders in their teaching and in securing records.

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In many States there was a realization that the part of the program within the county for which the home demonstration agent is responsible as leader must be sufficiently limited to make possible sound preparation of subject matter and planning of methods used in necessary follow-up work. Through the plan of analysis of fundamental problems of the homes of a county by the State office, home demonstration agent, and local people, it usually developed that there were two or three outstanding needs in every community. Thus, while aiming to meet the fundamental needs in each community, the agent was able to guide the planning of the programs of a majority of the communities of the county, so that they were sufficiently similar to enable the agent to concentrate on a selected number of outstanding needs, and to render efficient, well-prepared service. As a result, at the end of the year, there was a far greater record of achievements than hitherto, along a few selected lines, and a corresponding increase in interest and enthusiasm for the work by those participating in carrying out the program. The concrete results thus obtained aroused more people to an appreciation of the practices recommended, and strengthened public opinion in favor of extension work.

Every State in its report appeared to realize that, although extension work has been under way for a number of years, the number of farm women adopting improved practices was less than was desired. With this in mind State specialists and county home demonstration agents endeavored to analyze the subject matter available and to determine what improved practices might be recommended with the probability of being generally adopted by the women. Several States based their whole home demonstration program on the improved practice which could be recommended and eliminated all subject-matter instruction which could not be given in simple language to farm women who were untrained in the theory of nutrition and textiles.

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In most States groups undertaking a program of work during the year set goals of accomplishment in terms of improved practices adopted or the number of people to be influenced to improve practices. Such goals have been set in many counties, and in some States the subject-matter specialists have set goals of achievement for the project from a state-wide standpoint over a period of years. In this way the specific objective sought is clearly defined and serves as an incentive to the spread of influence from demonstrations. The results obtained, when checked against the goal set by the agents and people, indicate what actual progress has been made.

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During the past year, in several States, studies were begun relative to the effectiveness of the various media or devices for use in extension teaching, such as bulletins, exhibits, slides, motion pictures, debates, and slogans, through which extension agents are reaching large numbers of people. Studies, likewise, were made of the effectiveness of various means of contact, such as meetings (large versus small, general versus project group, county group versus community group), individual conferences, or fairs. Agents began to realize that just as there must be differentiation in the type of subject matter and the method of presentation for groups of children of different ages in the schoolroom, so in extension work careful consideration must be given to the psychology of varying as well as junior groups. (*239*).

In 1922, home and community demonstrations based on simple practices recommended by home demonstration workers were used.

tours were popular, and exhibits at local, county, and State fairs were improved in content and in the methods of determining the awards.

The score card as a means of extension teaching has had great prominence during 1922. The child's health, the living room, the dining room, the kitchen, family food habits, and the community as a whole in its social, educational, and economic conditions, were judged by the score-card method during 1922. The response received from the score-card method of teaching has been so great that it bids fair to be applied to many home demonstration projects (*239*).

Short courses at the colleges and camps, at which instruction and recreation were combined, were an inspiration to a considerable number of women and a much larger number of girls from the farms. The educational influences of home demonstration work are being perpetuated and improved by young women who have had training in the clubs and later in educational institutions and who are now "acting as leaders of constructive movements for better rural life in their respective counties."

The results of home demonstration work during 1922 include (1) the large amount of leadership developed among women and girls, (2) the large percentage of demonstrations completed, (3) the more general interpretation of subject matter into simple practices recommended for general adoption, (4) making the demonstration prove a practice desirable for a community and securing greater spread of influence from the demonstration, (5) more and better publicity, (6) the development of studies analyzing the effectiveness of methods of extension teaching in use, and (7) the evaluation of the work in terms which recognize not only the economic value of the service rendered, but also those social and educational values which are the real basis for rural betterment, satisfaction, and stability.

Clothing, poultry, and food-preservation projects have continued outstanding as to the number of counties and communities undertaking these projects, but there is a noticeable increase in the percentage of communities undertaking work in nutrition, home management, and projects of a civic nature. While rest rooms, cooperative buying and selling associations, home industries, canning centers, and the like have always been a part of the record of the community activities of home demonstration work, the community phases of the work undertaken during 1922 reflect a greater development of social-mindedness (*239*).

BOYS' AND GIRLS' CLUB WORK, 1920 TO 1923

After the passage of the Smith-Lever Act and particularly during the war period, the boys' and girls' club work had grown rapidly. The number of members enrolled in the clubs had risen from 300,000 in 1915 to over 1,000,000 at the close of 1918. It then declined rapidly to 450,000 members in 1920. During the war many city boys and girls had joined the clubs, especially in the school and home garden movement. The increase of special club agents paid with war-emergency funds, and the employment at that time of a much greater number of county agricultural and home demonstration agents, accounted largely for the great enrollment in the clubs. On July 1, 1917, there were 54 State leaders, 33 assistant State leaders, and 161 county leaders of boys' and girls' club work; in 1919 there were 64 State leaders, 89 assistant State leaders, and 533 county leaders; at the end of 1921 there were 60 State leaders, 60 assistant State leaders, and 180 county leaders. In spite of this diminution of paid leaders for this special purpose, the junior extension work was more firmly established than ever before, and the number of members enrolled

in 1922 was over 600,000. The large force of State leaders and assistant State leaders in this work stimulated the interest of county agricultural and home demonstration agents. Greater attention was given to the selection and training of voluntary local leaders of the clubs, and the number of such leaders had increased greatly. The organization and work of the clubs had become standardized, and club enterprises were more closely linked with the program of extension work for adults.

Standards for the organization and work of young people's clubs and for the products which they marketed were established early in the demonstration work in the South. Distinctive insignia, uniforms, caps, aprons, badges, and banners denoted membership and made it enjoyable to the young.

The first regular design for the boys' corn club had a grain of corn in the center with the four clover leaves around it. Various designs showed ears and stalks of corn on banners, badges, and ribbons. At one time they made "extensive use of a button marked 'Demonstrator.'"

The girls' clubs early used a badge showing a tomato with a clover leaf upon it. The motto, "To make the best better," was suggested by Miss Carrie Harrison, of the United States Department of Agriculture.

In 1911 O. H. Benson was brought into the Washington office as an assistant in club work. He had been a county superintendent of schools in Iowa, where he had organized boys' and girls' clubs. As a badge, he had used a three-leaf clover and H's representing head, hand, and heart. It was suggested by O. B. Martin, who had been in charge of club work in the South from its beginning, that another leaf and H, representing health, be added to produce a four-leaf clover. After the girls began to make exhibits of canned tomatoes and other fruits and vegetables at fairs and offer them for sale, Mrs. Jane S. McKimmon, State agent in North Carolina, suggested that standard products should have a special brand name. A number of suggestions for this brand were made, and finally at the conference for education in the South, at Richmond, Va., in 1913, Mr. Martin suggested that the figure 4 might be used in front of the H for this purpose. This met with the unanimous approval of the State agents present. The 4-H brand was first put on a tomato label widely used. It soon came into use to label many products sold by the boys as well as the girls and appeared on different club insignia. It has since been used to designate the standard clubs throughout the country.

When the Office of Farm Management of the Bureau of Plant Industry undertook in 1912 to push the development of boys' and girls' clubs in the Northern and Western States, Mr. Benson was transferred to that office for the purpose (*228*). The number of States cooperating in this work increased from 3 in 1912 to 32 in 1918. There was then great variety in the extent and character of the club activities. For the purpose of regulating competition in State and interstate contests, and for other reasons, it was found desirable to establish a distinct class of standard clubs. At the beginning of 1918 the Washington office and the State club leaders agreed on the following requirements for a standard club: (1) A membership of at least five engaged in the same project, (2) a local club leader throughout the year, (3) a local club organization with officers and a constitution,

(4) a definite club program for the year, (5) at least six regular meetings during the year, with a secretary to keep a record of the meetings and of the progress of each member, (6) a local exhibit annually, (7) a club demonstration team to give at least one public demonstration in the home community, (8) at least 60 per cent of the members must complete their demonstrations and file a report with the county or State leader, (9) a judging team chosen by competition of the members, (10) an achievement-day program on completion of the work, (11) the club must hold membership in the farm bureau or other county extension organization. When the first four requirements were met, a charter signed by the Secretary of Agriculture and the State extension director and leader was to be granted. When all the requirements were met in a single year, the club was to receive a seal of achievement. Each State champion was to become a life member of the National All-Star Club. In 1918 there were 119 such champions.

In a report on club work in 1921, George E. Farrell and Miss Gertrude L. Warren, of the Office of Extension Work, North and West, described the progress of the club movement during the 10 years 1912–1921 (*237*). The following is a summary of their conclusions:

In its early stages, the club work consisted principally of "contests." Corn and other products were exhibited at local and county fairs, and prizes were based entirely on the exhibits. Then followed production contests. These became popular and gave publicity to the problems of the farm. They led to net-profit contests, which had weak demonstrational value because they centered the attention of the public on the profit rather than on the practice. The schools, led in some cases by school superintendents, did much to make the early club work a success and were particularly favorable to it as a means of bringing teachers and parents together. It was believed that when the club contests were brought into cooperation with extension departments of the agricultural colleges, with the assistance of trained subject-matter specialists, they would do much to promote better practices in agriculture and to increase the interest of country boys and girls in farm and general community activities. "Thus the objective of the contest developed from that of the promotion of interest in agriculture and home making to that of the demonstration of better methods of agriculture and home making and insured for the young people involved a sound educational program affording opportunity for the development of community responsibility and leadership." In this way the contest became a "subactivity" in the junior extension program.

Other types of contests were developed, "the most common being the judging contests, demonstration team contests, and the county and State contests between individual club members or organized club groups."

Early in cooperative extension work with boys and girls, the term "project" took the place of "contests," distinguishing the work of the individual club member. The "basis of award" was a set of state-wide requirements, rather inflexible and imposed on the workers without much regard for individual or community needs. But as county agents and cooperating farm organizations increased in

number the club programs became more flexible and were more often based on county or community problems. More recently—

the club programs are planned to coordinate the community and county extension programs, which are formulated after a thorough survey or study has been made of the county, and only those boys and girls are encouraged to be demonstrators who are capable of carrying a demonstration to completion in an effective way.

The policy of having the club demonstration conform to the actual agricultural and home needs of each rural community, as determined by the people themselves in consultation with county extension agents, is regarded as the chief change in boys' and girls' club work since its development in a national way.

This plan has been justified by experience since "it has been found that the demonstrations conducted by boys and girls have carried over into community practice with the least expenditure of time and energy."

"The basis of award" in club contests has continued to be the subject of much discussion by State club leaders: "Hardly any two States have the same basis of award for any one club activity. Quantity, quality, net profit, record, and story have all been considered as important phases of the basis of award." Now that the demonstrational value of boys' and girls' club work has been proved, club leaders are considering methods of extending the influence of club demonstration.

With the expansion of the county extension program, club records and reports are gaining in importance through the wider use made of them by the young people, first, in showing others, especially the members of the county extension organization, how the objects of the demonstrations are realized, and, second, in presenting to the public, especially through the work of the demonstration teams and the press, more accurate data on yields and cost of production than were possible during the earlier stages of boys' and girls' club work (237).

Field days, tours, judging contests, team demonstrations in public, achievement days, and fairs or exhibits have become increasingly important in junior extension work. Such activities have helped to eliminate drudgery in farm work, break down local prejudices, and develop social intercourse in rural communities. They are one of the best means of interesting adults in the work. "Through organized club effort, boys and girls become a potent factor in carrying out the community program of work and in spreading the influence of the demonstration in the community." Through such work, too, farm boys and girls are becoming physically fit, mentally alert, and generally efficient. Through the principle of self-help, they are developing wholesome attitudes toward the work of the home and the farm with its changing conditions and are learning to solve in a natural and practical way the economic problems that all farm young people must meet.

Because paid leadership can not be extended to smaller units than the county, the importance of capable and trained local voluntary leaders is apparent. Adults whose ability for leadership has been shown by their assistance with the boys' and girls' clubs have often become powerful factors in community development. And in well-organized extension work persons of this kind often have acted as project leaders with both adults and young people. "Training conferences for project or local club leaders have proved increasingly effective as they have become better understood."

While the county agricultural and home demonstration agents have done much to develop the junior extension work, and thus far are the main county paid leaders, the importance of county club agents giving their entire time to boys' and girls' work has been amply demonstrated. In 1921 there were only 126 county club agents in the 33 Northern and Western States, as compared with about 1,500 county agricultural and home demonstration agents. Yet those club agents enrolled 35 per cent of all the club members in those States, and organized 41 per cent of all the clubs in operation that year. In the 48 States in 1922 the average number of club members completing their work was, for those under the direction of county agricultural agents, 44; for those under the direction of home demonstration agents, 185; and for those under the direction of club agents, 349 per agent.

It is apparent that the great number of farm boys and girls out of school will not be reached by the junior extension work until means are provided for the employment of a much larger number of county club agents.

EXTENSION WORK AMONG NEGROES

A force of negro men and women agents carry on extension work among people of their own race in the Southern States and supplement the considerable amount of work white agents have done and are doing which benefits the negro farming people. J. A. Evans, assistant chief of the Office of Cooperative Extension Work, who has a thorough knowledge of negro extension work from the time it began, recently described this work in United States Department of Agriculture Circular 355, from which the following summary has been prepared (*234*).

The necessity of extending the benefits of extension work in agriculture and home economics to the negro people may be seen from the fact that, according to the census of 1920, there are more than 920,000 negro farmers operating about 27,000,000 acres of improved land in farms, chiefly in 16 Southern States. The desirability of having some negro agents was seen almost as soon as farm demonstration work was begun. In November, 1906, the first negro agent was appointed by the Department of Agriculture in cooperation with Tuskegee Institute in Alabama, and a month later another agent was appointed in cooperation with Hampton Institute in Virginia.

Up to 1909 only Georgia, Mississippi, and South Carolina had been added to the States in which negro agents were employed and their total number was nine. The first negro woman agent, Mrs. Annie Peters, was employed in Okfuskee County, Okla., in 1912, through the cooperation of the Chamber of Commerce of Boley, a negro town. She was still at work there in 1923. When the Smith-Lever Act went into effect there were about 100 negro men and women agents in 11 States. Since then the number of such agents has steadily increased. At the close of 1923 there were 294 negro agents in 16 States, an increase of 44 during the year.

Alabama, Georgia, Mississippi, North Carolina, Texas, and Virginia had from 10 to 25 negro men county agents, and Arkansas, Georgia, Mississippi, and Texas had from 10 to 16 negro women county agents. Many of the counties had both men and women

agents, but in some States one agent worked in a number of counties. Work was regularly carried on in 260 counties, and some work was done in 30 or 40 additional counties, especially by club agents and other supervisory agents.

Since January 1, 1919, T. M. Campbell and J. B. Pierce have been employed as general field agents of the Office of Cooperative Extension Work to represent the United States Department of Agriculture in negro extension work. Their headquarters are at Tuskegee and Hampton Institutes, respectively.

Their duties are (1) to cooperate with State directors and other white supervisory agents, organizations, and individuals within the States in developing negro extension work; (2) to assist negro State supervisory agents in planning work, preparing reports, establishing relationships, and generally in getting more uniform and efficient service from the local agents; and (3) to study the best methods of doing extension work among negroes, as developed anywhere in their territory, and to take such information to agents in other States (*234*).

In 1923, 4 States employed negro men State leaders and 11 had assistant or district leaders, 7 had negro women supervisory agents, and 6 had negro club leaders. Generally these supervisory agents are located at the State negro agricultural and mechanical colleges. The entire negro force, except the two general field agents, are a part of the cooperative extension organization in the several States and work under the general supervision of the State extension director at the white agricultural college. Negro agents receive subject-matter assistance from specialists on the extension staffs of the white colleges and from the heads of departments of the negro colleges. They also are helped by the white county agents and their supervisory officers. Agents' conferences, short courses for adults and club members, and meetings of agents and farmers are annually held at the negro colleges. Regional conferences of the negro suprvisory agents with white officers of the Federal and State extension services have been held for a number of years, and in 1923 a similar conference, including agents from all the States employing negro agents, was held at Tuskegee Institute.

The funds used for negro extension agents increased from $4,184 in 1908 and $149,264 in 1918 to $385,085 in 1923. These funds came from the United States Department of Agriculture, Federal and State Smith-Lever funds, county appropriations, and local private sources.

In most States county appropriations for support of negro extension work are increasing. Progressive white citizens in many counties help to bring about the appointment of negro agents by appearing before county courts or chambers of commerce to urge support. Local funds for agents' salaries often come from other sources. Negro county councils or supervisory boards, in a number of States, have raised the required funds among members of their own race. Banks, and even private individuals, contribute through the college for county work. In Missouri, the work of the one agent is almost entirely financed by a negro farm bureau. Chambers of commerce, business men's leagues, and other civic organizations in some counties supply the local funds required to procure an agent (*234*).

For the year ended June 30, 1923, the amounts used from different sources were as follows: For negro men agents, United States Department of Agriculture $48,284, Smith-Lever $179,458, county and local funds $26,702; for negro women agents, United States Department of Agriculture $14,025, Smith-Lever $68,598, county and local funds $21,606.

The general plan of negro extension work is the same as that for white extension work but is made as simple and direct as possible.

The aim is to reach negro farmers and their families and to influence them to adopt better farm practices, to help them to increase their earning capacity, and to improve their living conditions; and also to interest negro boys and girls in farm activities, and to train them in the use of improved methods in farming and home making.

Some form of community organization, usually an agricultural club, is utilized in each county that has a negro agent. Community clubs elect local leaders, help make programs of work, raise funds for club equipment and for premiums at local fairs and exhibits, provide social entertainment, and assist generally in promoting various phases of the extension program for their community and county. Through the community club, cooperative purchases of lime, fertilizers, seeds, and other supplies are made at substantial savings to their members.

In Texas and some other States, a community council or board assists in making and executing programs. A central county organization, known as a county supervisory board or county council of agriculture, also exists in most of the counties in several States. * * * However organized, these central organizations function in much the same way. They hold meetings with agents at stated intervals, usually monthly, to discuss progress and to make plans. They assist in conducting county fairs, campaigns, rallies, camps, picnics, tours, and other extension activities during the year. Often they raise money to defray expenses of delegates to the State short course, for premiums at community and county fairs, and for other educational or extension purposes. In some counties, these organizations also raise funds to help pay the local agent's salary or expenses. It is in community clubs that voluntary leadership is developed and utilized. *The total number of voluntary county, community, and* local leaders actually engaged in forwarding adult negro demonstration work in 1923 was 7,575.

Besides these definite extension organizations, many cooperating organizations assist in carrying out programs of work in counties. Leading among these have been negro chambers of commerce, school officials and teachers, lodges, federations of women's clubs, health societies, and negro farmers' unions. The great number of different organizations, white and black, that are mentioned in the reports of 1923 as having cooperated in carrying on county work is very encouraging. Perhaps the rural negro churches were first of all in the extent of encouragement and support given to extension work in the counties. Few agents from any State fail to mention the church as one of their best cooperators in carrying out the programs of work (*234*).

In 1923 negro agents carried on a large number of field demonstrations in soil improvement, terracing, drainage, and with cereals, legumes, forage crops, cotton, sweet potatoes, tobacco, and other special crops, fruits and vegetables, and home gardens. The raising of poultry, pigs, and dairy cows for family use was a large item in the livestock work.

A considerable number of farmers were assisted in keeping accounts and in obtaining loans through Federal land banks. About 100 cooperative marketing associations were organized among negroes, and numerous small cooperative associations were formed to buy fertilizers, seed, and other farm supplies.

The affiliation of negro farmers with county and local organizations of all sorts increased greatly throughout the year. Thousands of negro farmers in all the Southern States have become members of cotton, tobacco, and other cooperative marketing associations which negro local agents, in common with white extension agents, assisted in promoting. So many negro farmers are members of the cooperative tobacco-marketing association in Virginia that the association has employed a negro field agent to work exclusively among them (*234*).

Women agents in about 100 counties in 11 States joined with the men in the work in dairying, poultry, gardening, fruit growing, beautification of home grounds, building and remodeling of houses

and other farm buildings, and home sanitation. They also carried on work with negro women on foods and nutrition, canning, clothing, and household equipment and management. A better-balanced diet for adults and children, school lunches, care of children, prevention of diseases, screening of houses, and building of sanitary toilets were emphasized. "In many counties community kitchens were built or rooms in schools or churches assigned for the purpose and equipped with the necessary utensils and furnished by the club women." The men and women agents organized 2,970 clubs with an enrollment of 21,629 boys and 33,873 girls. School teachers were largely represented among the 6,792 county, community, and local leaders actively engaged in promoting the club work.

Agents trained 277 demonstration teams of boys and 305 of girls, who gave demonstrations of various club activities at rallies, encampments, and community and county fairs. Two hundred and five junior judging teams were also trained and competed in various judging events.

Club exhibits made up a large part of all exhibits at fairs and won many cash premiums and other awards. Tens of thousands of negro boys and girls learned practical lessons in agriculture and home economics and earned some money through club work in 1923, and at the same time helped to influence others to do better farming or to improve the home living or surroundings.

Every negro agricultural college in the South has felt the influence of club work in its enrollment in agricultural and home-economic classes. In 1923, 939 negro club boys and girls were reported to have entered college, and every negro college had many former club boys and girls enrolled. Most of these were inspired by club work to seek a better education, and many earned a large part of the necessary money to pay tuition and expenses by their club activities (*234*).

Short courses in agriculture and home economics for negroes and their families were generally held at the negro agricultural colleges. Under the influence of the agents, exhibits were made by negroes at 784 community, county, and State fairs during 1923. In several counties in different States white and negro county fairs were combined that year for the first time.

"The community fairs were well attended by both negro and white farmers, as well as by business and professional men interested in the progress of negro farmers." Bankers and other business men often contributed liberally for premiums.

The movable school, which for years has been a unique and valuable feature of negro agents' work in Alabama, was continued on a larger scale in 1923. Similar work was begun in Mississippi. The movable school is conducted in Alabama by three agents, one man and two women, who travel through the country in an especially built and equipped motor truck, holding one to six-day sessions in various communities in the counties, in which they are assisted by the local farm and home demonstration agents. They also hold one-day meetings in some counties that have no agent.

The program of these schools embraces demonstrations and lectures on health and sanitation, farm and home improvement, care of poultry, and care and improvement of livestock. Through posters, handbills, and other means the time and place of the meetings are thoroughly advertised, and the attendance is always large. Men, women, boys, and girls are grouped in separate classes and given instruction in practical subjects. Such a school, by prearrangement, is staged at some negro farmer's home, and part of the instruction is in the remodeling, repairing, and improvement of the farmhouse and its surroundings by the local farmers, under the instruction of the agents. Terraces are made, poultry houses and sanitary toilets erected, houses screened and painted, and steps built. On the inside the women scrub, disinfect, renovate, and rearrange, so that when the school is over the house is like new. The object is first to impress on the community the value of these improvements, and second to teach the farmers themselves how to do the work. The equipment for teach-

ing women and girls consists of steam-pressure canners, fireless cookers, food choppers, table equipment, and material for teaching the cutting and fitting of clothing, and the making of dress forms, mattresses, rugs, and curtains.

With the Alabama school also goes a health nurse maintained by the State health department cooperating with the Tuskegee Institute, who gives instruction in caring for the sick, preserving health, applying first aid for accident or sickness, and allied subjects.

After stated working hours each day, the rest of the afternoon is given over to recreation and entertainment. For this purpose the truck carries tug-of-war rope, volley ball and net, various health games, and a motion-picture machine. It is equipped with a lighting plant.

During 1923 the teaching force of the movable school spent 164 days in the field, held 22 extension schools in as many counties, which included all counties that had agents, and reached 67 communities in Alabama. The total attendance at these schools was 24,447 men, women, and children. Both county agricultural and home demonstration agents consider that the movable school was of great help to them in their counties. It stimulated interest in all lines of work and advertised the programs of work in the county as nothing else could. The movable school in Mississippi, during the first year, specialized on home improvement with excellent results. The supervising agent believes that the movable school will have a permanent place in programs of future negro work in that State (*234*).

After the close of the World War, extension work among negroes was carried on with difficulty. A spirit of unrest prevailed, due to the returning soldiers and was increased by professional agitators. Unrest was intensified by the unfavorable economic conditions which followed. Many negroes left the farms and went to near-by towns or to cities in the North. In this unfortunate situation the negro extension agents did a great service by persuading many of their people to make a more careful and intelligent survey of the conditions at home, before venturing into work with which they were not familiar and into communities where they would be strangers, and by providing them with useful instruction and work which occupied their minds and helped them to continue farm life with better results. Both white and negro agents did much to improve the relations between the races and to obtain for the negroes better opportunities for education and more profitable disposal of their farm products.

GENERAL STATUS OF COOPERATIVE EXTENSION WORK IN 1923

In the nine years following the passage of the Smith-Lever Act, the funds for extension work from all sources had risen from $3,597,236 in the fiscal year 1915 to $18,821,144 in 1923. In the latter year the regular Smith-Lever fund was $4,580,000, the supplementary Smith-Lever fund $1,300,000, the farmers' cooperative demonstration fund, $1,027,981, and the funds from department bureaus $45,221, making a total Federal appropriation of $6,953,202. From sources within the States, the offset for regular and supplementary Smith-Lever funds was $5,400,000, additional State and college funds $1,628,572, county funds $4,125,675, contributions from farm bureaus and miscellaneous sources $713,695, a total of $11,867,942. To these funds there was added for the maintenance of the Washington extension office, about $214,000. The extension funds in the States were used approximately for the following purposes: Administration, $1,015,000; county-agent work, $9,038,000; home demonstration work, $3,013,000; boys' club work, $1,112,000; extension specialists, $3,239,000; extension schools, fairs, publications, and miscellaneous, $504,000.

The number of cooperative extension employees June 30, 1923, was as follows: Men in county agricultural agent work, directors and State leaders, 56; assistant State leaders and district agents, 111; county agents and assistants, 2,158; local negro agents, 179; total, 2,504; women in home demonstration work, State leaders, 43; assistant State leaders and district agents, 74; county agents and assistants, 834; local negro agents, 104; total, 1,055; men and women in boys' and girls' club work, State leaders, 42; assistant State leaders, 60; county leaders, 163; total, 255; extension specialists in various branches of agriculture and home economics, about 750; grand total of cooperative extension employees, 4,564. During the calendar year 1922 about 885,000 demonstrations were conducted by farmers or members of their families guided by the various classes of extension agents.

During the period following the passage of the Smith-Lever Act, cooperative extension work became permanently established as a nation-wide system of practical education for the farming people out of school. It had also been demonstrated that great good would come to agriculture and country life by the cooperation in this great enterprise of the Federal, State, and county governments and the farming people as individuals or as represented by their organizations.

REORGANIZATION OF THE DEPARTMENT'S EXTENSION WORK

When the States Relations Service was established in 1915 it was intended that it should broadly represent the Department of Agriculture in its relations with the State agricultural colleges, schools, and experiment stations, as well as carry on the Federal experiment stations in Alaska and the insular territories, and the investigations in home economics. Such an arrangement promoted correlation of all the department's activities connected with the work of the State agricultural colleges and experiment stations. During this period policies and relationships resulting from the nation-wide organization of the cooperative extension work had to be determined and fitted to the more complex organization of the State institutions for agricultural education and research.

But as the department's organization grew in extent and complexity and involved more numerous and intricate relationships with State institutions and affairs, it became evident that a reorganization of its overhead administrative offices was necessary. The activities of the department grouped themselves somewhat distinctly under four main heads, (1) research, (2) extension work, (3) regulatory and service work, and (4) publicity and publications.

Work in these separate lines was generally conducted in the several bureaus of the department, and there was need for the correlation of their efforts. To meet this situation, authority was obtained from Congress to appoint directors of scientific work, extension work, and regulatory work, who should have general supervision of the department's activities in these lines, respectively. Combining the publicity work of the department and the preparation and distribution of publications in a single office was contemplated, but was not brought about until later.

This reorganization resulted in the abolishment of the States Relations Service on June 30, 1923.

The Office of Experiment Stations was brought into close relations with the director of scientific work. The Office of Cooperative Extension Work was made a part of an extension service, which also included the Office of Exhibits and the Office of Motion Pictures. The Office of Home Economics was raised to the status of a bureau. The small division of agricultural instruction was put under the general supervision of the former director of the States Relations Service, who was attached to the office of the Secretary as a specialist in States relations work.

The Office of Cooperative Extension Work was thus in a position to deal more effectively, through the director of extension work, with all the bureaus engaging in extension work and to correlate the department's activities more fully with the extension work of the State institutions. To aid in the correlation of the department's extension work with that of the several States, specialists in the main activities of the bureaus were attached to the Office of Cooperative Extension Work. These included specialists in agronomy, horticulture, forestry, plant pathology, animal husbandry, agricultural economics, and home economics.

APPENDIX

SMITH-LEVER ACT

AN ACT To provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an act of Congress approved July second, eighteen hundred and sixty-two, and of acts supplementary thereto, and the United States Department of Agriculture.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same, there may be inaugurated in connection with the college or colleges in each State now receiving, or which may hereafter receive, the benefits of the act of Congress approved July second, eighteen hundred and sixty-two, entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts" (Twelfth Statutes at Large, page five hundred and three), and of the act of Congress approved August thirtieth, eighteen hundred and ninety (Twenty-sixth Statutes at Large, page four hundred and seventeen and chapter eight hundred and forty-one), agricultural extension work which shall be carried on in cooperation with the United States Department of Agriculture: *Provided,* That in any State in which two or more such colleges have been or hereafter may be established the appropriations hereinafter made to such State shall be administered by such college or colleges as the legislature of such State may direct: *Provided further,* That, pending the inauguration and development of the cooperative extension work herein authorized, nothing in this act shall be construed to discontinue either the farm management work or the farmers' cooperative demonstration work as now conducted by the Bureau of Plant Industry of the Department of Agriculture.

SEC. 2. That cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this act.

SEC. 3. That for the purpose of paying the expenses of said cooperative agricultural extension work and the necessary printing and distributing of information in connection with the same, there is permanently appropriated, out of any

money in the Treasury not otherwise appropriated, the sum of $480,000 for each year, $10,000 of which shall be paid annually, in the manner hereinafter provided, to each State which shall by action of its legislature assent to the provisions of this act: *Provided*, That payment of such installments of the appropriation hereinbefore made as shall become due to any State before the adjournment of the regular session of the legislature meeting next after the passage of this act may, in the absence of prior legislative assent, be made upon the assent of the governor thereof, duly certified to the Secretary of the Treasury: *Provided further*, That there is also appropriated an additional sum of $600,000 for the fiscal year following that in which the foregoing appropriation first becomes available, and for each year thereafter for seven years a sum exceeding by $500,000 the sum appropriated for each preceding year, and for each year thereafter there is permanently appropriated for each year the sum of $4,100,000 in addition to the sum of $480,000 hereinbefore provided: *Provided further*, That before the funds herein appropriated shall become available to any college for any fiscal year, plans for the work to be carried on under this act shall be submitted by the proper officials of each college and approved by the Secretary of Agriculture. Such additional sums shall be used only for the purposes hereinbefore stated, and shall be allotted annually to each State by the Secretary of Agriculture and paid in the manner hereinbefore provided, in the proportion which the rural population of each State bears to the total rural population of all the States as determined by the next preceding Federal census: *Provided further*, That no payment out of the additional appropriations herein provided shall be made in any year to any State until an equal sum has been appropriated for that year by the legislature of such State, or provided by State, county, college, local authority, or individual contributions from within the State, for the maintenance of the cooperative agricultural extension work provided for in this act.

SEC. 4. That the sums hereby appropriated for extension work shall be paid in equal semiannual payments of the first day of January and July of each year by the Secretary of the Treasury upon the warrant of the Secretary of Agriculture, out of the Treasury of the United States, to the treasurer or other officer of the State duly authorized by the laws of the State to receive the same; and such officer shall be required to report to the Secretary of Agriculture, on or before the first day of September of each year, a detailed statement of the amount so received during the previous fiscal year, and of its disbursement, on forms prescribed by the Secretary of Agriculture.

SEC. 5. That if any portion of the moneys received by the designated officer of any State for the support and maintenance of cooperative agricultural extension work, as provided in this act, shall by any action or contingency be diminished or lost or be misapplied, it shall be replaced by said State to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to said State, and no portion of said moneys shall be applied, directly or indirectly, to the purchase, erection, preservation, or repair of any building or buildings, or the purchase or rental of land, or in college-course teaching, lectures in colleges, promoting agricultural trains, or any other purpose not specified in this act, and not more than five per centum of each annual appropriation shall be applied to the printing and distribution of publications. It shall be the duty of each of said colleges annually, on or before the first day of January, to make to the governor of the State in which it is located a full and detailed report of its operations in the direction of extension work as defined in this act, including a detailed statement of receipts and expenditures from all sources for this purpose, a copy of which report shall be sent to the Secretary of Agriculture and to the Secretary of the Treasury of the United States.

SEC. 6. That on or before the first day of July in each year after the passage of this act the Secretary of Agriculture shall ascertain and certify to the Secretary of the Treasury as to each State whether it is entitled to receive its share of the annual appropriation for cooperative agricultural extension work under this act, and the amount which it is entitled to receive. If the Secretary of Agriculture shall withhold a certificate from any State of its appropriation, the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the Treasury until the expiration of the Congress next succeeding a session of the legislature of any State from which a certificate has been withheld, in order that the State may, if it should so

desire, appeal to Congress from the determination of the Secretary of Agriculture. If the next Congress shall not direct such sum to be paid, it shall be covered into the Treasury.

SEC. 7. That the Secretary of Agriculture shall make an annual report to Congress of the receipts, expenditures, and results of the cooperative agricultural extension work in all of the States receiving the benefits of this act, and also whether the appropriation of any State has been withheld, and if so, the reason therefor.

SEC. 8. That Congress may at any time alter, amend, or repeal any or all of the provisions of this act.

Approved, May 8, 1914 (38 Stat. L. 372).

EXTENSION ITEMS IN UNITED STATES DEPARTMENT OF AGRICULTURE APPROPRIATION ACT, 1923

For farmers' cooperative demonstration work, including special suggestions of plans and methods for more effective dissemination of the results of the work of the Department of Agriculture and the agricultural experiment stations and of improved methods of agricultural practice, at farmers' institutes and in agricultural instruction, *and for the employment of labor in the city of Washington* and elsewhere, supplies, and all other necessary expenses, $1,300,000: *Provided*, That the expense of such service shall be defrayed from this appropriation and such cooperative funds as may be voluntarily contributed by State, county, and municipal agencies, associations of farmers, and individual farmers, universities, colleges, boards of trade, chambers of commerce, other local associations of business men, business organizations, and individuals within the State:

For cooperative agricultural extension work, to be allotted, paid, and expended in the same manner, upon the same terms and conditions, and under the same supervision as the additional appropriations made by the act of May 8, 1914 (Thirty-eighth Statutes at Large, page 372), entitled "An act to provide for cooperative agricultural extension work between the agricultural colleges in the several States receiving the benefits of an act of Congress approved July 2, 1862, and of acts supplementary thereto, and the United States Department of Agriculture," $1,300,000; and all sums appropriated by this act for use for demonstration or extension work within any State shall be used and expended in accordance with plans mutually agreed upon by the Secretary of Agriculture and the proper officials of the college in such State which receives the benefits of said act of May 8, 1914: *Provided*, That of the above appropriation not more than $300,000 shall be expended for purposes other than the salaries of county agents.

STATISTICS OF COOPERATIVE EXTENSION WORK, 1914 TO 1923

TABLE 4.—*Federal and State funds used in cooperative extension work under terms of Smith-Lever Act, 1914–1923*

Year	Federal	Offset from sources within States				
		Total	State	College	County	Local
1914-15	$480,000.00					
1915-16	1,080,000.00	$597,923.73	$470,649.42	$26,834.76	$69,226.79	$31,212.76
1916-17	1,580,000.00	1,096,064.38	893,058.99	59,056.32	94,566.74	49,382.33
1917-18	2,080,000.00	1,588,066.29	1,262,305.01	51,025.46	215,077.20	59,658.62
1918-19	2,580,000.00	2,058,828.04	1,539,300.08	46,766.34	316,367.59	156,394.03
1919-20	4,512,765.63	3,984,344.36	2,439,467.52	191,287.03	1,095,923.84	257,665.97
1920-21	5,079,999.05	4,494,048.80	2,858,480.54	107,961.07	1,518,778.45	8,808.44
1921-22	5,880,000.00	5,030,349.45	3,160,939.21	57,063.42	1,712,675.09	99,671.73
1922-23	5,880,000.00	5,400,000.00	3,226,057.98	410,546.72	1,528,312.82	235,082.48

TABLE 5.—*Funds available to States for cooperative agricultural extension work, classified by original sources, 1914–15 to 1922–23, inclusive*

Sources of funds	1914–15	1915–16	1916–17	1917–18	1918–19
Federal Government:					
Farmers' cooperative demonstration work	$905,782	$900,390	$958,334	$951,334	$966,596
Other bureaus	105,168	165,172	185,893	507,283	935,374
Emergency				2,949,072	4,598,243
Federal Smith-Lever—					
Regular	474,935	1,077,924	1,575,054	2,068,066	2,538,828
Total	1,485,885	2,143,486	2,719,281	6,475,755	9,039,041
Within the State:					
State and college—					
Offset—					
Regular		497,484	952,114	1,313,330	1,586,066
Other	1,044,270	872,734	832,114	881,091	901,829
Total	1,044,270	1,370,218	1,784,228	2,194,421	2,487,895
County—					
Offset—					
Regular		69,227	94,557	215,077	316,368
Other	780,332	973,251	1,258,296	1,863,632	2,291,209
Total	780,332	1,042,478	1,352,853	2,078,709	2,607,577
Miscellaneous—					
Offset—					
Regular		31,213	48,383	59,659	156,394
Other	286,748	276,786	244,874	494,219	370,653
Total	286,748	307,999	293,257	553,878	527,047
Total within the States	2,111,350	2,720,695	3,430,338	4,827,008	5,622,519
Grand total	3,597,235	4,864,181	6,149,619	11,302,763	14,661,560

Sources of funds	1919–20	1920–21	1921–22	1922–23[1]
Federal Government:				
Farmers' cooperative demonstration work	$1,021,091	$1,025,083	$1,007,264	$1,027,981
Other bureaus	406,021	435,047	209,541	45,221
Federal Smith-Lever—				
Regular	2,964,344	3,474,048	4,010,349	4,580,000
Supplementary	1,500,000	1,500,000	1,500,000	1,300,000
Total	5,891,456	6,434,178	6,727,154	6,953,202
Within the State:				
State and college—				
Offset—				
Regular	2,630,755	2,966,462	3,218,002	3,164,372
Supplementary				448,233
Other	1,244,466	1,549,897	1,497,380	1,628,572
Total	3,875,221	4,516,359	4,715,382	5,241,177
County—				
Offset—				
Regular	1,095,924	1,518,778	1,712,675	778,909
Supplementary				751,404
Other	2,865,740	3,293,566	2,972,740	4,123,675
Total	3,961,664	4,812,344	4,685,415	5,653,988
Miscellaneous—				
Offset—				
Regular	257,666	8,806	99,671	158,719
Supplementary				100,363
Other	672,073	1,030,560	954,128	713,695
Total	929,739	1,039,366	1,053,799	972,777
Total within the States	8,766,624	10,358,069	10,454,596	11,867,942
Grand total	14,658,080	16,792,247	17,181,750	18,821,144

[1] Allotments.

TABLE 6.—*Allotments of funds from all sources for cooperative agricultural extension work, 1914–15 to 1922–23, inclusive*

Year	Total	Administration	Printing and distribution of publications	County-agent work	Home demonstration work [1]	Boys' club work	Home-economics specialists [2]	Extension schools
1914–15	[3] $3,498,815	$295,309	$71,598	$1,902,230	$319,823	$162,448		$198,354
1915–16	4,864,181	445,244	99,780	2,411,540	510,867	231,227		198,045
1916–17	6,149,620	512,891	137,648	3,058,641	741,680	319,557		175,754
1917–18	11,302,765	754,176	207,479	5,604,963	2,226,228	669,666		153,904
1918–19	14,661,560	930,658	263,617	7,124,501	2,889,210	921,021		131,782
1919–20	14,658,080	995,052	308,629	7,665,171	2,177,024	883,616	$332,415	144,188
1920–21	16,792,248	1,147,757	382,034	8,911,965	2,388,473	923,962	300,147	147,188
1921–22	18,497,360	1,009,847	309,283	9,670,786	2,980,741	1,244,092	396,979	145,087
1922–23	18,821,143	1,014,570	357,711	9,938,398	3,012,603	1,112,529	538,887	128,900

Year	Animal husbandry	Poultry	Dairying	Animal diseases	Agronomy	Horticulture	Botany and plant pathology	Entomology, apiculture, ornithology	Rodent pests
1914–15	$42,448	$19,475	$106,008	$4,563	$20,913	$29,928	$4,923	$3,940	
1915–16	131,938	47,328	172,558	21,936	77,859	79,745	14,014	8,511	
1916–17	162,064	59,499	208,967	44,216	105,530	84,070	32,598	14,826	$10,436
1917–18	309,271	70,403	332,853	31,777	153,211	125,605	61,591	100,783	56,671
1918–19	380,169	199,442	289,757	71,679	170,535	163,789	296,908	112,475	151,374
1919–20	231,142	151,162	276,918	63,201	218,019	190,601	196,723	88,680	129,141
1920–21	300,270	209,454	323,183	36,533	281,548	244,886	246,405	98,491	158,167
1921–22	321,132	237,385	297,200	39,675	330,840	274,984	117,900	98,911	66,610
1922–23	347,874	254,278	312,630	36,605	353,834	270,475	116,145	108,449	43,700

Year	Forestry	Agricultural engineering	Farm management	Rural organization	Marketing	Exhibits and fairs	Farmers' institutes	Correspondence courses	Miscellaneous specialists
1914–15	$3,965	$13,042	$51,531	$5,060	$2,390	$14,019	$92,379	$8,443	$126,027
1915–16	3,639	36,680	88,469	39,447	20,494	12,650	93,815	30,867	78,528
1916–17	9,559	50,601	102,033	46,194	50,237	12,482	94,521	50,804	58,814
1917–18	5,100	64,517	102,302	42,152	104,268	13,160	62,259	21,202	27,224
1918–19	9,499	97,295	125,614	49,575	163,928	10,529	65,035	25,089	27,389
1919–20	10,695	125,161	116,381	30,026	179,621	23,245	70,267	24,908	26,004
1920–21	10,936	124,743	146,060	22,518	259,041	20,079	66,652	29,649	12,072
1921–22	16,890	139,850	152,928	23,160	367,370	18,180	44,235	31,160	173,165
1922–23	17,540	158,938	185,513	27,880	181,674	18,650	35,985	36,540	210,745

[1] Prior to 1920 this item included home-economics specialists.
[2] Prior to 1920 included in home demonstration work.
[3] $68,324 not included by projects.

TABLE 7.—*Number of counties with men county extension agents, 1914–1923*

State	Number of counties	July 1—									
		1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Alabama	67	67	67	65	62	66	65	55	55	55	54
Arizona	14	------	3	6	7	11	11	10	9	11	11
Arkansas	75	45	52	53	61	68	66	58	44	40	47
California	58	4	11	13	17	33	35	35	37	40	41
Colorado	63	13	13	19	16	29	27	24	24	26	23
Connecticut	8	1	6	7	8	8	8	8	8	8	7
Delaware	3	------	3	3	2	3	3	3	3	3	3
Florida	54	25	36	33	37	53	47	32	31	33	37
Georgia	155	80	81	83	117	120	134	97	85	98	88
Idaho	44	2	3	7	11	27	32	34	32	28	21
Illinois	102	14	18	20	22	53	63	81	85	85	94
Indiana	92	27	31	32	40	83	76	68	82	85	86
Iowa	99	9	11	16	26	97	99	99	99	99	100
Kansas	105	9	39	56	53	67	53	51	59	56	58
Kentucky	120	28	39	47	45	90	71	53	61	61	59
Louisiana	64	41	43	43	42	58	55	41	38	45	45
Maine	16	------	3	4	9	16	16	16	16	16	16
Maryland	24	8	13	16	23	22	23	22	23	22	23
Massachusetts	14	1	10	9	11	13	13	11	11	11	11
Michigan	83	11	17	22	30	71	63	60	64	69	64
Minnesota	86	27	23	19	16	85	86	82	83	77	67
Mississippi	82	48	49	44	53	79	75	71	50	56	56
Missouri	115	13	15	14	15	71	52	47	58	55	54
Montana	51	4	8	7	12	23	24	27	26	26	24
Nebraska	93	5	8	9	8	79	54	39	46	42	42
Nevada	17	------	------	------	6	8	4	6	7	9	11
New Hampshire	10	1	5	8	9	10	10	9	10	10	10
New Jersey	21	4	7	11	10	17	18	18	18	18	18
New Mexico	29	------	8	9	11	25	26	22	19	18	22
New York	62	25	20	36	41	56	55	55	55	55	55
North Carolina	100	51	64	65	69	91	87	77	59	66	73
North Dakota	53	17	15	15	17	38	32	28	36	36	33
Ohio	88	8	10	12	20	63	65	63	80	83	85
Oklahoma	77	40	56	59	62	77	70	73	71	74	67
Oregon	36	10	12	13	14	24	23	26	26	24	22
Pennsylvania	67	10	14	22	45	53	40	54	57	59	60
Rhode Island	5	------	------	4	4	5	4	4	4	4	4
South Carolina	46	43	43	42	40	43	45	45	42	42	38
South Dakota	69	3	5	11	13	59	36	39	43	48	43
Tennessee	95	36	38	48	57	91	76	45	38	41	48
Texas	253	98	99	90	92	178	168	127	128	143	148
Utah	29	8	10	8	15	28	22	21	19	19	22
Vermont	14	7	9	11	13	13	13	12	13	13	11
Virginia	100	53	55	51	53	75	71	57	61	77	70
Washington	39	7	10	13	22	34	29	32	31	28	24
West Virginia	55	13	27	29	45	48	48	40	31	40	39
Wisconsin	71	9	12	13	22	59	41	42	50	50	47
Wyoming	21	3	6	6	13	15	13	14	16	16	16
Total	[1]3,044	928	1,136	1,225	1,436	2,435	2,247	2,033	2,043	2,120	2,097

[1] Number of counties reporting agricultural products.

TABLE 8.—*Number of counties with women county extension agents, 1914–1923*

State	Number of counties	July 1— 1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Alabama	67	18	19	27	28	67	54	32	36	34	34
Arizona	14					3	6	6	8	10	9
Arkansas	75	15	20	31	47	65	58	42	34	32	38
California	58					24	8	10	10	16	21
Colorado	63			2		7	3	2	1	2	2
Connecticut	8				5	8	6	6	3	5	6
Delaware	3				1	3	2				
Florida	54	24	27	28	35	54	42	29	28	29	24
Georgia	155	29	48	45	57	125	93	66	66	70	68
Idaho	44					24	4	5	5	21	30
Illinois	102			1		88	17	11	11	11	16
Indiana	92					22	8	5	3	2	2
Iowa	99					96	23	19	21	18	17
Kansas	105					14	8	9	7	8	9
Kentucky	120	9	19	24	27	96	74	18	19	26	24
Louisiana	64	13	13	18	20	33	32	24	25	26	28
Maine	16					14	2	5	10	14	15
Maryland	24	5	6	10	13	22	23	21	17	16	17
Massachusetts	14			1	6	12	10	9	9	11	9
Michigan	83			1	1	24	13	12	10	8	7
Minnesota	86					39	8	8	7	4	3
Mississippi	82	33	33	32	49	71	64	53	35	48	51
Missouri	115					48	20	11	14	13	8
Montana	51					18	11	9	7	11	7
Nebraska	93				2	30	10	7	7	3	3
Nevada	17			1		10	5	5	6	4	4
New Hampshire	10				2	9	6	3	5	6	8
New Jersey	21			1		8	5	8	7	9	8
New Mexico	29					11	5	4	4	2	4
New York	62			1	3	38	24	22	28	31	32
North Carolina	100	27	34	44	48	72	66	59	47	49	50
North Dakota	53				2	33	5	4	2	6	2
Ohio	88			1		13	5	2	7	10	8
Oklahoma	77	19	24	22	23	50	46	40	36	37	42
Oregon	36					15	5	5	6	4	4
Pennsylvania	67			1		48					
Rhode Island	5					4		2	3	5	2
South Carolina	46	21	24	31	36	44	45	45	36	30	36
South Dakota	69					42	3	3	1	1	15
Tennessee	95	18	24	31	49	94	77	41	26	25	28
Texas	253	26	27	38	31	67	69	55	38	52	79
Utah	29			2	2	14	4	6	3	15	4
Vermont	14					7	5	4	6	9	10
Virginia	100	17	22	25	38	52	36	28	23	30	34
Washington	39					22	6	8	7	7	6
West Virginia	55	5	10	12	12	33	22	12	8	18	15
Wisconsin	71					17	4	2	1	1	1
Wyoming	21					5	7	7	6	6	6
Total	[1]3,044	279	350	430	537	1,715	1,049	794	699	801	846

[1] Number of counties reporting agricultural products.

TABLE 9.—*Kind and number of extension workers, 1917–1923*

Kind of agent	July 1, 1917	Jan. 1, 1918	July 1, 1918	Jan. 1, 1919	July 1, 1919	Jan. 1, 1920	July 1, 1920	Jan. 1, 1921	July 1, 1921	Jan. 1, 1922	July 1, 1922	Jan. 1, 1923	July 1, 1923
COUNTY-AGENT WORK (*Men*)													
Directors and State leaders	62	60	63	57	62	60	60	60	59	55	51	52	56
Assistant State leaders	80	99	283	164	157	147	127	125	123	134	116	110	109
County agents and assistants	1,451	2,087	2,513	2,405	2,412	2,024	2,014	1,996	2,085	2,090	2,104	2,102	2,177
Local agents (colored)	66	105	142	148	177	151	158	157	154	148	162	172	179
Total	1,659	2,351	3,001	2,774	2,808	2,382	2,359	2,338	2,421	2,427	2,433	2,436	2,521
HOME DEMONSTRATION WORK (*Women*)													
State leaders	20	61	61	49	47	44	43	43	45	45	46	42	43
Assistant State leaders and district agents	33	90	104	124	123	116	106	94	92	97	76	67	75
County agents	533	1,056	1,485	1,184	1,196	810	806	753	725	720	743	777	838
Local agents (colored)	7	71	175	134	250	51	74	67	84	76	110	101	103
City agents	-----	122	190	173	151	11	10	11	13	5	-----	-----	-----
City agents (colored)	-----	8	19	15	7	-----	-----	-----	-----	-----	-----	-----	-----
Total	593	1,408	2,034	1,679	1,774	1,032	1,039	968	959	943	975	987	1,059
BOYS' AND GIRLS' CLUB WORK													
State leaders	54	47	45	50	64	60	66	62	61	57	45	42	41
Assistant State leaders	33	101	134	95	89	73	66	58	58	53	78	56	59
County leaders	161	297	1,002	300	533	251	310	239	208	194	205	169	153
Total	248	445	1,181	445	686	384	442	859	327	304	328	267	253
Grand total	2,500	4,204	6,216	4,898	5,268	3,798	3,840	3,665	3,707	3,674	3,736	3,690	3,833

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